STIC Search Report
EIC 1700

STIC Database Tracking Number: 168372

TO:	From:
Necholus Ogden **Location: REM 9A31** **Art Unit : 1751** **October 19, 2005** **Case Serial Number: 10/678889**	**Mei Huang** **Location: EIC 1700** **REMSEN 4B28** **Phone: 571/272-3952** **Mei.huang@uspto.gov**

Search Notes

Examiner Ogden,

Please review the attached search results.

If you have any questions or if you would like to refine the search query, please feel free to contact me.

Thank you for using STIC services!

Mei Huang

```
=> fil reg
FILE 'REGISTRY' ENTERED AT 14:23:19 ON 19 OCT 2005
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DICTIONARY FILE UPDATES:  18 OCT 2005  HIGHEST RN 865529-02-8

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TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

  Please note that search-term pricing does apply when
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*************************************************************************
*                                                                       *
* The CA roles and document type information have been removed from     *
* the IDE default display format and the ED field has been added,       *
* effective March 20, 2005.  A new display format, IDERL, is now        *
* available and contains the CA role and document type information.     *
*                                                                       *
*************************************************************************

Structure search iteration limits have been increased.  See HELP SLIMITS
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=> fil hcap
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FILE COVERS 1907 - 19 Oct 2005  VOL 143 ISS 17
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FILE LAST UPDATED: 18 Oct 2005 (20051018/ED)

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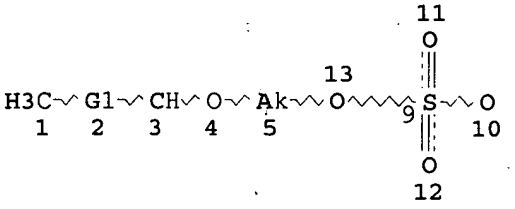
This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d que l29 stat
L13 STR



← parent Structure

REP G1=(0-16) CH
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT IS LIN SAT AT 5
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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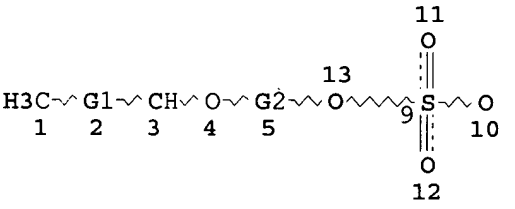
NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE
L22 STR



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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

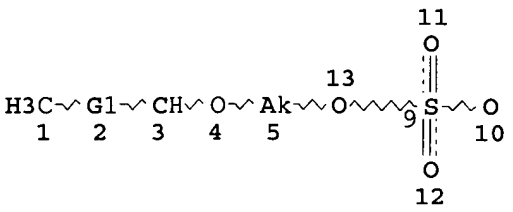
GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE
L26 1206 SEA FILE=REGISTRY SSS FUL L13
L28 20 SEA FILE=REGISTRY SUB=L26 SSS FUL L22
L29 9 SEA FILE=HCAPLUS L28

└→ 9 answers on Page 4-13

=> d que 143

L13 STR



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DEFAULT MLEVEL IS ATOM
GGCAT IS LIN SAT AT 5
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE
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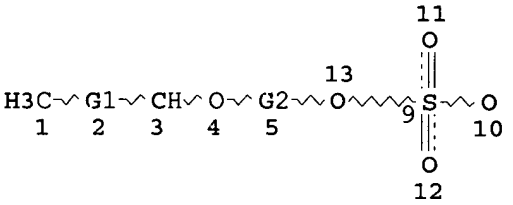

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REP G2=(3-6) CH2
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE
L26 1206 SEA FILE=REGISTRY SSS FUL L13
L28 20 SEA FILE=REGISTRY SUB=L26 SSS FUL L22
L29 9 SEA FILE=HCAPLUS L28
L31 318880 SEA FILE=HCAPLUS (CLEAN? OR CLEANSER? OR LAUND? OR DEINK? OR RINS? OR DETERS? OR DETERG? OR ABSTERS? OR EDULCORAT? OR SANIT? OR HYGIEN? OR DISINFECT? OR DECONTAMINA? OR STERILI? OR ABLUT? OR ELUTION# OR ELUTRIAT? OR SCRUB? OR SCOUR? OR DEGREAS? OR LIXIV? OR WASH?)/IT
L32 436589 SEA FILE=HCAPLUS (SURFACT? OR BIOSURFACT? OR HYDROTROP? OR DETERG? OR ABSTERG? OR (SURFACE(W)ACTIVE# OR WETTING#)(A)(AGENT? OR ADDITIVE? OR COMPOUND? OR COMPD# OR CMPD# OR CPD#) OR EMULSIFIER? OR DISPERSANT? OR SOAP? OR SHAMPOO?)

There 26 answers (P13–65) are obtained combining the parent structure structure query, L13, page 2, with utility words. There are broader results.

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L33        11479 SEA FILE=HCAPLUS 46-3/SC
L34         1877 SEA FILE=HCAPLUS L26 AND L31
L35         4340 SEA FILE=HCAPLUS L26 AND (L32 OR L33)
L36         1836 SEA FILE=HCAPLUS L34 AND L35
L37           67 SEA FILE=HCAPLUS L36 AND L33
L39       999004 SEA FILE=HCAPLUS (MIXT# OR MIXTURE? OR BLEND? OR ADMIX?
                 OR COMMIX? OR IMMIX? OR INTERMIX? OR COMPOSIT? OR COMPN#
                 OR COMPSN# OR FORMULAT? OR INTERSPER?)/TI
L40           27 SEA FILE=HCAPLUS L37 AND L39
L42           35 SEA FILE=HCAPLUS L29 OR L40
L43           26 SEA FILE=HCAPLUS L42 NOT L29
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=> d l29 cbib abs hitstr hitind 1-9
```

← Applicant

L29 ANSWER 1 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN

2002:487507 Document No. 137:64930 Branched primary alcohol compositions and derivatives, their preparation for detergents. Edwards, Charles Lee; Raney, Kirk Herbert; Shpakoff, Paul Gregory (Shell Internationale Research Maatschappij BV, Neth.). PCT Int. Appl. WO 2002050006 A2 20020627, 61 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2001-EP15143 20011220. PRIORITY: US 2000-PV257670 20001221.

AB A branched alc. compn. comprising a branched ether primary alc. Me(CHR1)xCHR2O(CH2)3OH where R1 = H or a hydrocarbyl radical having 1-3 C atoms, R2 = hydrocarbyl radical having 1-7 C atoms, x = 0-16, where the total no. of C atoms in the alc. is 9-24; and alkyl ether sulfate, alc. alkoxysulfate, and alkanol alkoxylate derivs. are useful in detergent compns. Thus, 0.6 mol of 1-dodecene and 1.8 mol of 1,3-propanediol and 0.024 mol of toluenesulfonic acid monohydrate were heated to 150° for 4 h, and give a 2 phase mixt. from which was sepd. 3-dodecyloxy-1-propanol (I), selectivity to I was 97%, which was reacted with chlorosulfonic acid (0.7 mol) to give an anionic surfactant having crit. micelle concn. (25°) 0.062 and surface tension 28 dynes/cm.

IT **439293-82-0P 439293-83-1P**
RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)
(branched primary alc. compns. and derivs. for surfactants with good cold water soly. and high Ca tolerance)

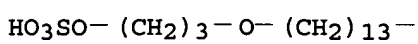
RN 439293-82-0 HCAPLUS

CN 1-Propanol, 3-(dodecyloxy)-, hydrogen sulfate (9CI) (CA INDEX NAME)

$HO_3SO-(CH_2)_3-O-(CH_2)_{11}-Me$

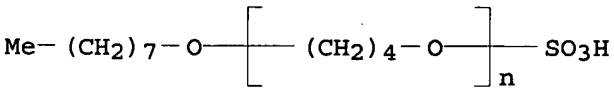
RN 439293-83-1 HCAPLUS

CN 1-Propanol, 3-(tetradecyloxy)-, hydrogen sulfate (9CI) (CA INDEX NAME)



IC ICM C07C043-00
CC 46-3 (Surface Active Agents and Detergents)
Section cross-reference(s): 23
IT **439293-82-0P 439293-83-1P** 439293-84-2P
439293-85-3P 439293-86-4P 439293-87-5P
RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)
(branched primary alc. compns. and derivs. for surfactants with good cold water soly. and high Ca tolerance)

L29 ANSWER 2 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN
1990:140779 Document No. 112:140779 Alkoxytitanium-based surface treatment and treated fillers. Mori, Atsushi; Aizawa, Mamoru; Kataoka, Yoshiharu (Nippon Soda Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 01170624 A2 19890705 Heisei, 7 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1987-329355 19871225.
AB Title fillers, useful for high-mol.-wt. matrixes, are treated with products prepd. from tetralkoxytitanium and/or its hydrolyzed oligomers (d.p. ≤6) and oxyalkylene-contg. acids with 0.1-2.0 mol the acid residues per Ti. Thus, 1 mol tetraisopropoxytitanium and 1 mol mono(pentaoxyethylene) maleate (I) were treated at 60° for 1 h to give title treatment. Then, 100 parts Whiton SSB was mixed with 50 parts of 2% aq. soln. of the treatment and treated at 110° for 2 h to give a filler, 100 parts of which was blended with 75 parts Diol 3000 and kneaded for 30 min to give a compn. showing viscosity 4000 cP at 25° vs. 62,000 for a compn. using a treatment prepd. similarly using N-aminoethylaminoethanol instead of I.
IT **125925-80-6DP**, reaction products with tetraisopropoxytitanium
RL: PREP (Preparation)
(prepn. of, as surface treatment for fillers)
RN 125925-80-6 HCAPLUS
CN Poly(oxy-1,4-butanediyl), α-sulfo-ω-(octyloxy)- (9CI) (CA INDEX NAME)



IC ICM C08K009-04
ICS C08K009-04; C09C001-36
CC 38-3 (Plastics Fabrication and Uses)
IT 5593-70-4DP, reaction products with polyoxyalkylene-contg. acids
26183-44-8DP, reaction products with tetraisopropoxytitanium tetramer 31800-89-2DP, reaction products with tetrabutoxytitanium
80165-12-4DP, reaction products with tetrabutoxytitanium hexamers

82293-55-8DP, reaction products with polyoxyalkylene-contg. acids
125826-06-4DP, reaction products with polyoxyalkylene-contg. acids
125870-89-5DP, reaction products with polyoxyalkylene-contg. acids
125925-79-3P **125925-80-6DP**, reaction products with tetraisopropoxytitanium 125925-81-7DP, reaction products with tetraisopropoxytitanium pentamer
RL: PREP (Preparation)
(prepn. of, as surface treatment for fillers)

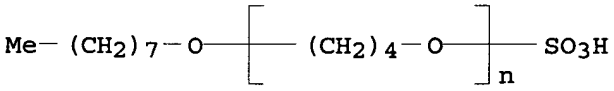
L29 ANSWER 3 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN
1990:140609 Document No. 112:140609 Surface treatment of fillers with alkoxytitanium coupling agents. Mori, Atsushi; Aizawa, Mamoru; Kataoka, Yoshiharu (Nippon Soda Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 01252642 A2 19891009 Heisei, 10 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1988-81047 19880401.

AB Coupling agents for use on non-silicate fillers even in aq. systems contain alkoxytitanium derivs. which are prepd. by the reaction of tetraalkoxytitanium and/or its hydrolytic polycondensate (d.p. <6) with an acid contg. a polyoxyalkylene chain and a compd. forming a cyclic chelate with Ti and contain 0.1-2.0 mol acid residue/mol Ti and >0.2 mol chelating agent/mol Ti. Stirring (iso-PrO)4Ti 1, pentaethylene glycol maleic acid monoester 1, glycolic acid 1, and acetylacetone 1 mol at 60° for 1 h and removing iso-PrOH gave a coupling agent which (80 parts 2% aq. soln.) was mixed with 100 parts Whiton SSB and dried at 110° to give a coated filler. A 100:75 mixt. of the filler and Diol 3000 (polyether polyol) had viscosity 3800 cP, vs. 70,000 with a (BuO)4Ti-triethanolamine reaction product as the coupling agent.

IT **125925-80-6D**, titanium complexes
RL: USES (Uses)
(coupling agents, for fillers)

RN 125925-80-6 HCAPLUS

CN Poly(oxy-1,4-butanediyl), α-sulfo-ω-(octyloxy)- (9CI) (CA INDEX NAME)



IC ICM C08K009-04
ICS C07F007-28; C08K009-04

CC 37-6 (Plastics Manufacture and Processing)

IT 50-21-5D, Lactic acid, titanium complexes 77-92-9D, titanium complexes 79-14-1D, titanium complexes 87-69-4D, titanium complexes 105-45-3D, titanium complexes 112-27-6D, Triethylene glycol, titanium complexes 123-54-6D, Acetylacetone, titanium complexes 5593-70-4D, Titanium tetrabutoxide, complexes 5910-25-8D, 3-Phenylacetylacetone, titanium complexes 9022-96-2D, Titanium tetrabutoxide polymer, complexes 26183-44-8D, titanium complexes 31800-89-2D, titanium complexes 37916-19-1D, titanium complexes 53339-36-9D, complexes **125925-80-6D**, titanium complexes 125925-81-7D, titanium complexes 126093-15-0D, titanium complexes
RL: USES (Uses)

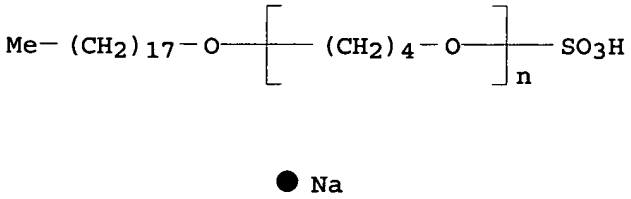
(coupling agents, for fillers)

L29 ANSWER 4 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN
1988:77471 Document No. 108:77471 Deinking compositions containing alkylene oxide adducts for recycling of wastepaper. Hamaguchi, Koji; Togashi, Fumihiko; Miyauchi, Yoshitaka (Kao Corp., Japan). Eur. Pat. Appl. EP 241224 A2 19871014, 30 pp. DESIGNATED STATES: R: DE, ES, FR, GB. (English). CODEN: EPXXDW. APPLICATION: EP 1987-302886 19870402. PRIORITY: JP 1986-83419 19860411; JP 1986-313874 19861224.

AB A deinking compn. for recycling waste paper comprises (A) an alkylene oxide adduct of a mixt. of a natural oil or fat and a polyhydric alc. and (B) a compd. selected from the group consisting of (B1) an alkylene oxide adduct of a higher alc. having the formula RO(AO)nH (R = C12-18-alkyl or alkenyl, A = C2-4 alkylene, and n = >5); (B2) a sulfate of an alkylene oxide adduct of a higher alc. having the formula R1O(A1O)mSO3M (R1 = C10-18-alkyl or alkenyl, A1 = alkylene, m = 0.3-5, and M = H, an alkali metal, or NH4) and (B3) a C8-22 fatty acid or its salt. The preferred wt. ratio of (A) to (B) is 99:1-30:70. Thus, 0.4% ethylene oxide (EO)-propylene oxide (PO) adduct with glycerol and palm oil along with C18H37O(EO)10(PO)4H (I) in 70:30 wt. ratio was mixed with NaOH, Na silicate, aq. H2O2 soln., and H2O, mixed with shredded waste newsprint, disintegrated at 55° for 20 min, aged at 50° for 60 min, dild. with H2O to form a 1% pulp consistency. The pulp slurry was treated with 1% CaCl2, subjected to flotation treatment at 30° for 10 min, concd. to 6%, dild. to 1%, and shaped into pulp sheets showing degree of brightness 57.5%, residual ink droplet no. 18, and unreleased ink droplet no. 8, compared with 54.0, 50, and 31, resp., for a similar deinking agent without I.

IT **83574-34-9**
RL: USES (Uses)
(deinking agents contg., for waste paper)

RN 83574-34-9 HCAPLUS
CN Poly(oxy-1,4-butanediyl), α-sulfo-ω-(octadecyloxy)-, sodium salt (9CI) (CA INDEX NAME)



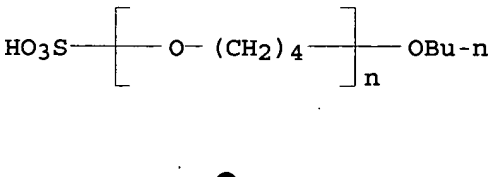
IC ICM D21C005-02
ICS C07C043-11; C07C141-08; C08L071-02

CC 43-6 (Cellulose, Lignin, Paper, and Other Wood Products)

IT 75-21-8D, adducts with polyhydric alcs. and vegetable oil or fat
77-85-0D, Trimethylolethane, adducts with alkylene oxide and vegetable oils or fats 107-21-1D, adducts with alkylene oxide and vegetable oils or fats 115-77-5D, adducts with alkylene oxide and vegetable oils or fats 9003-11-6D, adducts with polyhydric alcs. and vegetable oil or fat 9004-82-4 9038-43-1 32612-48-9

34431-26-0 37311-00-5 37311-01-6 63428-87-5 65742-74-7
83574-34-9 85537-47-9 86836-15-9 99752-71-3
106392-12-5D, Ethylene oxide-propylene oxide block copolymer, adducts with polyhydric alcs. and vegetable oil or fat 111445-48-8
112869-03-1D, adducts with polyhydric alcs. and vegetable oil or fat
112871-48-4 112871-49-5 112871-50-8 112871-55-3 112898-60-9
RL: USES (Uses)
(deinking agents contg., for waste paper)

L29 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN
1984:39446 Document No. 100:39446 Bases for hair preparations. (Lion Corp., Japan). Jpn. Kokai Tokkyo Koho JP 58172307 A2 19831011 Showa, 9 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1982-54719 19820401.
AB Hair prepns. contain alkylene oxide polymer derivs. (such as polypropylene oxide monobutyl ether Na sulfate [88088-94-2] and polyethylene oxide-propylene oxide carboxymethyl ether K salt [88385-89-1]) as bases. The compds. are highly sol. and do not cause staining on clothing and hair is readily manageable after treatment. Thus, a cream rinse was prepd. contg. liq. paraffin 2, stearyl alc. 2, dialkyldimethylammonium chloride 2, polyoxyethylene stearyl ether 2, polyethylene oxide-propylene oxide ether with 2,3-dihydroxypropyltrimethylammonium bromide [88385-90-4] 1, polypropylene oxide ether with 2,3-dihydroxypropyltrimethylammonium bromide and butanol [88293-21-4] 1, propylene glycol 8 and distd. H2O 82% and perfumes and colors.
IT **88292-01-7**
RL: BIOL (Biological study)
(hair prepns. contg.)
RN 88292-01-7 HCAPLUS
CN Poly(oxy-1,4-butanediyl), α-sulfo-ω-butoxy-, potassium salt (9CI) (CA INDEX NAME)



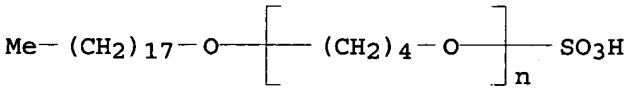
IC A61K007-06
CC 62-3 (Essential Oils and Cosmetics)
IT 88088-94-2 **88292-01-7** 88293-21-4 88293-22-5
88293-23-6 88385-89-1 88385-90-4 88385-91-5 88403-70-7
88423-63-6
RL: BIOL (Biological study)
(hair prepns. contg.)

L29 ANSWER 6 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN
1982:599869 Document No. 97:199869 Filtration-dewatering aids for aqueous slurries. (Kao Soap Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 57084708 A2 19820527 Showa, 5 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1980-162212 19801118.

AB Filtration-dewatering aids for aq. slurries of water-insol. metal hydroxides are prepd. from anionic surfactants RO(ZO)nR1 [R = C8-24 alkyl, alkenyl; Z = C2-4 alkylene; R1 = SO3 M (M = H, K, Na, NH4), PO3M1, CH3CO2M1 (M1 = K, Na); n = 1-100]. Thus, a mixt. of 100 mL 1 M aq. NaOH and 60 g Al(OH)3, after 30 s, was suction-filtered at 500 mm for 3 min to give a cake, which was washed with 100 mL water (90°) contg. 100 ppm C12H25O(C2H4O)3SO3Na (I) [13150-00-0] and suction-filtered (with air passage) at 500 mm for 3 min. The cake (50 g) was dried at 110°. Weighing of the cake at these stages showed that the water content in the cake before drying at 110° was 8.4%, compared with 12.0% when I was omitted.

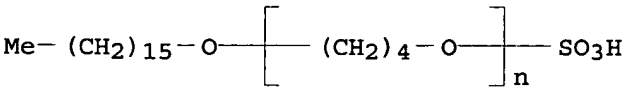
IT **83574-34-9 83574-35-0 83574-36-1**
83574-37-2
RL: USES (Uses)
(aluminum hydroxide filtration in presence of, for improved dewatering of filter cake)

RN 83574-34-9 HCAPLUS
CN Poly(oxy-1,4-butanediyl), α-sulfo-ω-(octadecyloxy)-, sodium salt (9CI) (CA INDEX NAME)



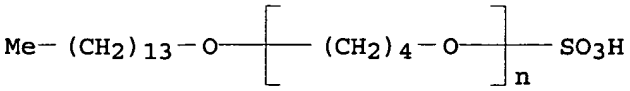
● Na

RN 83574-35-0 HCAPLUS
CN Poly(oxy-1,4-butanediyl), α-sulfo-ω-(hexadecyloxy)-, sodium salt (9CI) (CA INDEX NAME)



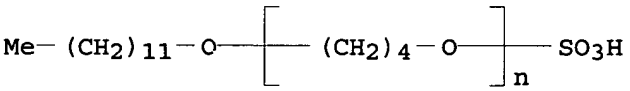
● Na

RN 83574-36-1 HCAPLUS
CN Poly(oxy-1,4-butanediyl), α-sulfo-ω-(tetradecyloxy)-, sodium salt (9CI) (CA INDEX NAME)



● Na

RN 83574-37-2 HCAPLUS
CN Poly(oxy-1,4-butanediyl), α-sulfo-ω-(dodecyloxy)-, sodium salt (9CI) (CA INDEX NAME)



● Na

IC B01D021-01
ICA C11D001-02
CC 46-3 (Surface Active Agents and Detergents)
Section cross-reference(s): 49
IT 9004-82-4 13150-00-0 15826-21-8 36348-64-8 43168-25-8
54717-42-9 64728-57-0 64939-56-6 74791-05-2 74791-09-6
74812-85-4 74812-89-8 78900-96-6 78922-78-8 83566-71-6
83566-72-7 83566-73-8 83566-74-9 83566-75-0 83566-76-1
83566-77-2 83566-78-3 83566-79-4 83566-80-7 83566-81-8
83566-82-9 83566-83-0 83566-84-1 83566-85-2 **83574-34-9**
83574-35-0 83574-36-1 83574-37-2
83574-61-2 83582-33-6 83582-34-7 83582-35-8 83582-36-9
83582-37-0 83582-38-1 83582-39-2 83582-40-5 83582-41-6
83582-42-7 83582-43-8 83582-46-1 83582-47-2 83603-55-8
83603-56-9 83603-57-0 83603-58-1
RL: USES (Uses)
(aluminum hydroxide filtration in presence of, for improved dewatering of filter cake)

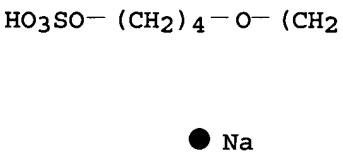
L29 ANSWER 7 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN
1981:605790 Document No. 95:205790 Physicochemical properties of anionic surfactants with poly(oxyalkylene) group in water. Tsujii, Kaoru; Okahashi, Kenji; Takeuchi, Takashi (Tochigi Res. Lab., Kao Soap Co., Tochigi, Japan). Yukagaku, 30(9), 566-72 (Japanese) 1981.
CODEN: YKGKAM. ISSN: 0513-398X.
AB The physicochem. properties are detd. for aq. solns. of Na salts of sulfate esters of alkoxylated C12-18 fatty alcs. contg. 1-8 oxyalkylene groups/mol. The Krafft point is lower for surfactants contg. polyoxypropylene groups than for surfactants contg. polyoxyethylene groups. The surfactants have good compatibility with Ca2+ in water. The interfacial tensions between oil and the surfactant solns. are decreased by the addn. of CaCl2 or MgSO4.

Clouding similar to that in nonionic surfactant solns. is obsd. at high concns. of inorg. salts. The surfactants form addn. compds. with some zwitterionic surfactants in the hydrated solid phases below the Krafft points. The surfactants contg. polyoxyethylene groups have higher crit. micelle concns., compared with surfactants contg. polyoxypropylene and polyoxybutylene groups. The effects of the polyoxyethylene group on the crit. micelle concn. are discussed quant.

IT **3694-72-2**
RL: USES (Uses)
(surfactant properties of)

RN 3694-72-2 HCAPLUS

CN 1-Butanol, 4-(dodecyloxy)-, hydrogen sulfate, sodium salt (7CI, 9CI) (CA INDEX NAME)



● Na

CC 46-1 (Surface Active Agents and Detergents)

IT 3088-31-1 **3694-72-2** 13150-00-0 15826-16-1 43168-25-8
51814-80-3 65423-83-8 74791-03-0 74791-04-1 74791-05-2
74812-85-4 74812-89-8 79762-95-1 79777-32-5 79777-33-6
RL: USES (Uses)
(surfactant properties of)

L29 ANSWER 8 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN

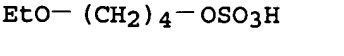
1978:530007 Document No. 89:130007 Polymerization of tetrahydrofuran by proton acids. Pruckmayr, G.; Wu, T. K. (Chem., Dyes Pigm. Dep., E. I. du Pont de Nemours and Co., Wilmington, DE, USA). Macromolecules, 11(4), 662-8 (English) 1978. CODEN: MAMOBX. ISSN: 0024-9297.

AB Polymn. of THF [109-99-9] with nonhydrolyzable protic acids such as CF3SO3H [1493-13-6] leads to very high mol. wt. polymers by a combination of chain coupling-ring opening steps. Hydrolyzable protic acids, e.g. HFSO3 [7789-21-1], lead to polymeric species of lower mol. wt. through mono- and dialkyl sulfate formation. Sulfate formation is normally irreversible and slower than chain propagation, causing mol. wts. to go through a max. Such polymns. are not living, but are slowly dying, the rate of termination depending on the polymn. conditions.

IT **67767-21-9**
RL: PRP (Properties)
(NMR of, as model compd. in polymn. of THF by proton acids)

RN 67767-21-9 HCAPLUS

CN 1-Butanol, 4-ethoxy-, hydrogen sulfate (9CI) (CA INDEX NAME)



CC 35-4 (Synthetic High Polymers)

IT 64-67-5 111-73-9 625-22-9 763-23-5 15507-13-8 67767-20-8
67767-21-9
RL: PRP (Properties)
(NMR of, as model compd. in polymn. of THF by proton acids)

L29 ANSWER 9 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN
1965:455578 Document No. 63:55578 Original Reference No. 63:10179e-f
The synthesis and some surface-active properties of alkylthioalkyl and alkoxyalkyl sulfates. Livingston, J. R., Jr.; Drogin, Robert (Esso Res. & Eng. Co., Linden, NJ). Journal of the American Oil Chemists' Society, 42(8), 720-3 (English) 1965. CODEN: JAOCA7. ISSN: 0003-021X.

AB Na alkylthio- and alkoxyalkyl sulfates were prepd. to det. the effect of the presence, position, and nature of the heteroatom on the crit. micelle concn. (c.m.c.), the surface activity, and detergency of a surfactant. All of the compds. were linear and contained a total of 16 C atoms. Hexadecyl sulfate was used as the reference compd. Insertion of either a S or O atom into the hydrocarbon chain raised the c.m.c. In the O series, the trend was to a higher c.m.c. as the O atom was moved farther away from the sulfate group, whereas no trend was observed in the thio ether series. The surface activity of hexadecyl sulfate was higher than either the ether or thio ether series. The farther the heteroatom from the sulfate group, the lower was the surface activity. This trend was more pronounced in the oxy ethers. All heterosubstituted compds. were generally inferior to hexadecyl sulfate in detergency. Hydration of the O atom in the oxy ethers, but not the S atom in the thio ethers, is proposed as the explanation for the observed trends.

IT **3694-72-2**, 1-Butanol, 4-(dodecyloxy)-, hydrogen sulfate (ester), Na salt **3694-73-3**, 1-Hexanol, 6-(decyloxy)-, hydrogen sulfate, Na salt
(prepn. and surface-active properties of)

RN 3694-72-2 HCAPLUS
CN 1-Butanol, 4-(dodecyloxy)-, hydrogen sulfate, sodium salt (7CI, 9CI) (CA INDEX NAME)

$HO_3SO-(CH_2)_4-O-(CH_2)_{11}-Me$

● Na

RN 3694-73-3 HCAPLUS
CN 1-Hexanol, 6-(decyloxy)-, hydrogen sulfate, sodium salt (7CI, 9CI) (CA INDEX NAME)

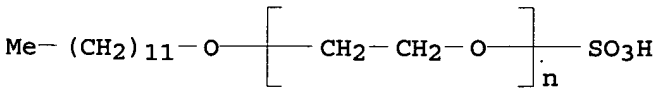
$HO_3SO-(CH_2)_6-O-(CH_2)_9-Me$

● Na

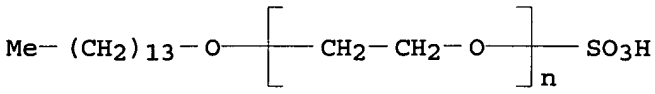
CC 53 (Surface-Active Agents and Detergents)
IT 3694-71-1, 1-Dodecanol, 12-butoxy-, hydrogen sulfate (ester), Na salt **3694-72-2**, 1-Butanol, 4-(dodecyloxy)-, hydrogen sulfate (ester), Na salt **3694-73-3**, 1-Hexanol, 6-(decyloxy)-, hydrogen sulfate, Na salt 3694-74-4, Ethanol, 2-(tetradecyloxy)-, hydrogen sulfate (ester), Na salt 3694-75-5, Ethanol, 2-(tetradecylthio)-, hydrogen sulfate (ester), Na salt 3694-76-6, 1-Undecanol, 11-(pentylthio)-, hydrogen sulfate (ester), Na salt 3694-77-7, 1-Butanol, 4-(dodecylthio)-, hydrogen sulfate (ester), Na salt 3694-78-8, 1-Hexanol, 6-(decylthio)-, hydrogen sulfate, Na salt
(prepn. and surface-active properties of)

=> d l43 cbib abs hitstr hitind 1-26

L43 ANSWER 1 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
2005:726262 Document No. 143:195610 Powder **detergent composition** containing anionic and nonionic **surfactants**, zeolite and alkali metal carbonate.. Inoue, Takumi; Hasumi, Motomitsu; Nishimura, Hiroshi; Iwamoto, Yoshihiro (Kao Corp., Japan). Jpn. Kokai Tokkyo Koho JP 2005213489 A2 20050811, 11 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2004-25984 20040202.
AB The title compn. comprises: (A) 12-30 wt.% anionic **surfactant**, R1-O-(EtO)m-SO3-M+ (R1=C8-18 straight/branched alkyl/alkenyl group, m=av. d.p. 0.5-4 (<50 wt.% of component with m=0), M+=Na+ or Ca2+); (B) 1-9 wt.% polyoxyalkylene nonionic **surfactant** with HLB 9-16; (C) 5-50 wt.% Zeolite; and (D) 5-50 wt.% alkali metal carbonate; (A)/(B)=5.7/4.3-9.67/0.33. Thus, odor-free **detergent** compn. was prepd. from polyethylene glycol,tetradecyl ether sodium sulfate 13, Emulgen 108KM 9, Zeobuilder 27, Dense Ash 14, sodium sulfate 12, and NaCl 4, showing high **detergency** and re-contamination resistance.
IT **9004-82-4 27731-62-0**, Sodium poly(oxyethylene) tetradecyl ether sulfate **34431-26-0**
RL: TEM (Technical or engineered material use); USES (Uses)
(powder **detergent** compn. contg. anionic and nonionic **surfactants**, zeolite and alkali metal carbonate)
RN 9004-82-4 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-(dodecyloxy)-, sodium salt (9CI) (CA INDEX NAME)

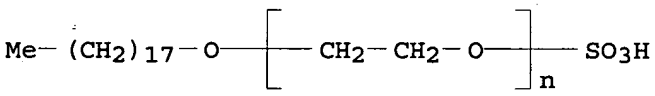


RN 27731-62-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-(tetradecyloxy)-, sodium salt (9CI) (CA INDEX NAME)



● Na

RN 34431-26-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-(octadecyloxy)-, sodium salt (9CI) (CA INDEX NAME)



● Na

IC ICM C11D001-29
ICS C11D001-72; C11D003-10; C11D003-12; C11D017-06
CC **46-3** (Surface Active Agents and Detergents)
ST polyethylene glycol alkyl sulfate anionic **surfactant** zeolite **detergent** compn; polyoxyalkylene nonionic **surfactant** carbonate powder **detergent** compn
IT A zeolites
RL: TEM (Technical or engineered material use); USES (Uses)
(Zeobuilder; powder **detergent** compn. contg. anionic and nonionic **surfactants**, zeolite and alkali metal carbonate)
IT Polyoxyalkylenes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(alkyl group-terminated; powder **detergent** compn. contg. anionic and nonionic **surfactants**, zeolite and alkali metal carbonate)
IT **Surfactants**
(anionic; powder **detergent** compn. contg. anionic and nonionic **surfactants**, zeolite and alkali metal carbonate)
IT **Surfactants**
(nonionic; powder **detergent** compn. contg. anionic and nonionic **surfactants**, zeolite and alkali metal carbonate)
IT **Detergents**
(powd.; powder **detergent** compn. contg. anionic and nonionic **surfactants**, zeolite and alkali metal carbonate)
IT Polyoxyalkylenes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(powder **detergent** compn. contg. anionic and nonionic

surfactants, zeolite and alkali metal carbonate)

IT Polyoxyalkylenes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(sulfo-terminated; powder **detergent** compn. contg. anionic and nonionic **surfactants**, zeolite and alkali metal carbonate)

IT 497-19-8, Dense Ash, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(Dense Ash; powder **detergent** compn. contg. anionic and nonionic **surfactants**, zeolite and alkali metal carbonate)

IT 7647-14-5, Sodium chloride, uses 7757-82-6, Sodium sulfate, uses **9004-82-4** 25322-68-3D, PEO, C12-14 alkyl ether **27731-62-0**, Sodium poly(oxyethylene) tetradecyl ether sulfate **34431-26-0** 227015-79-4, Emulgen 108KM
RL: TEM (Technical or engineered material use); USES (Uses)
(powder **detergent** compn. contg. anionic and nonionic **surfactants**, zeolite and alkali metal carbonate)

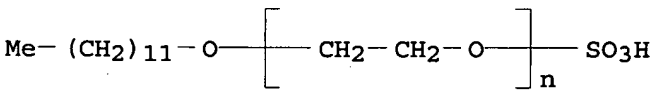
L43 ANSWER 2 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
2002:846625 Document No. 137:312738 Synergistic **detergent composition** containing dissolution enhancers and method for preparing the same. Dhanuka, Vinodkumar Ramniranjan; Dhalewadikar, Shashank Vaman (Hindustan Lever Limited, India). Indian IN 174044 A 19940903, 25 pp. (English). CODEN: INXXAP. APPLICATION: IN 1991-BO249 19910830.

AB A synergistic **detergent** compn. comprising a **surfactant** and from 0.05 to 5% by wt. of rate of dissoln. enhancer (RODEs) in the form of uniform layer or layers over the **surfactant.** The incorporation of the RODEs surprisingly exhibit enhanced rate of dissoln.

IT **9004-82-4**, Sodium lauryl ether sulfate
RL: TEM (Technical or engineered material use); USES (Uses)
(dissoln. enhancer; synergistic **detergent** compn. contg. dissoln. enhancers and method for prepg. the same)

RN 9004-82-4 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-(dodecyloxy)-, sodium salt (9CI) (CA INDEX NAME)



IC ICM C11D001-12

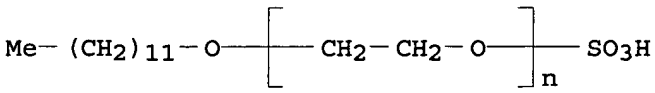
CC **46-3** (Surface Active Agents and Detergents)

ST dissoln enhancer synergistic **detergent**

IT Sulfonic acids, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(1-alkenesulfonic, salts, dissoln. enhancer; synergistic **detergent** compn. contg. dissoln. enhancers and method for

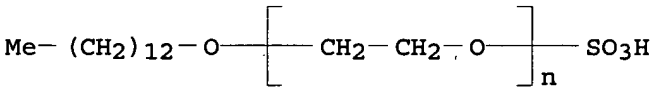
prepg. the same)
IT Sulfonic acids, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(alkanesulfonic, salts, secondary, dissoln. enhancer; synergistic **detergent** compn. contg. dissoln. enhancers and method for prepg. the same)
IT Polyoxyalkylenes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(dissoln. enhancer; synergistic **detergent** compn. contg. dissoln. enhancers and method for prepg. the same)
IT **Surfactants**
(synergistic **detergent** compn. contg. dissoln. enhancers and method for prepg. the same)
IT **Detergents**
(synergistic; synergistic **detergent** compn. contg. dissoln. enhancers and method for prepg. the same)
IT **9004-82-4**, Sodium lauryl ether sulfate 25322-68-3, Polyethylene glycol
RL: TEM (Technical or engineered material use); USES (Uses)
(dissoln. enhancer; synergistic **detergent** compn. contg. dissoln. enhancers and method for prepg. the same)

L43 ANSWER 3 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
2001:823346 Document No. 135:359419 Polyethylene glycol alkyl ether sulfates with narrow molecular weight distribution, their manufacture, and their liquid **detergent compositions** with good cleaning ability, foamability, and storage stability, and low skin irritation. Oyaizu, Takahisa; Oyama, Akira; Yoshiya, Masahisa; Nishio, Hiroshi (Lion Corp., Japan). Jpn. Kokai Tokkyo Koho JP 2001316352 A2 20011113, 11 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 2000-135804 20000509.
AB R1O(CH2CH2)nSO3M (R1 = linear or branched C6-24 alkyl, alkenyl; n = av. 1-6; M = H, alkali metal ion, alk. earth metal ion, NH4+, C2-3 mono-, di-, trialkanolammonium), whose 55-75% have d.p. (nA - 1) to (nA + 1) (nA = peak d.p. in mol. wt. distribution curve), and which contain ≤30 ppm 1,4-dioxane, are manufd. by addn. of ethylene oxide to alcs. in the presence of Mg-based mixed metal oxides as alkoxylation catalysts, removing the catalysts, and sulfation. Thus, Conol 20P (n-dodecanol) and Diadol 13 (linear and branched tridecanol) were autoclaved with ethylene oxide in the presence of AlMgMnOx (x = valance), filtered, the filtrate sulfonated with SO3 in a thin-film reactor, and neutralized with aq. NaOH to give polyethylene glycol ether sulfate salt (65% of which showed d.p. 1-3) contg. 25 ppm dioxane.
IT **9004-82-4P 54116-08-4P**
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(oligomeric; manuf. of polyethylene glycol alkyl ether sulfates with narrow mol. wt. distribution and low dioxane content for liq. **detergents**)
RN 9004-82-4 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-(dodecyloxy)-, sodium salt (9CI) (CA INDEX NAME)



● Na

RN 54116-08-4 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-(tridecyloxy)-, sodium salt (9CI) (CA INDEX NAME)



● Na

IC ICM C07C305-06
ICS A61K007-075; C07C303-24; C11D001-29; C11D001-75; C11D001-90; C11D017-08; C07B061-00
CC **46-3** (Surface Active Agents and Detergents)
ST **detergent** polyethylene glycol ether sulfate manuf; alkoxylation catalyst magnesium aluminum manganese oxide; metal oxide catalyst liq **detergent** manuf; mol wt distribution narrow **detergent** manuf; dioxane byproduct polyethylene glycol sulfate manuf
IT Sulfonates
RL: TEM (Technical or engineered material use); USES (Uses)
(1-alkene, C14, sodium salts; manuf. of polyethylene glycol alkyl ether sulfates with narrow mol. wt. distribution and low dioxane content for liq. **detergents**)
IT **Detergents**
(liq.; manuf. of polyethylene glycol alkyl ether sulfates with narrow mol. wt. distribution and low dioxane content for liq. **detergents**)
IT Alkoxylation catalysts
Sulfation
(manuf. of polyethylene glycol alkyl ether sulfates with narrow mol. wt. distribution and low dioxane content for liq. **detergents**)
IT Group VIB element compounds
Group VIIB element compounds
Group VIII element compounds
RL: CAT (Catalyst use); USES (Uses)
(mixed metal oxides; manuf. of polyethylene glycol alkyl ether sulfates with narrow mol. wt. distribution and low dioxane content for liq. **detergents**)
IT 123-91-1P, Dioxane, preparation
RL: BYP (Byproduct); PREP (Preparation)
(manuf. of polyethylene glycol alkyl ether sulfates with narrow

mol. wt. distribution and low dioxane content for liq. **detergents**)

IT 66578-96-9P, Aluminum magnesium manganese oxide
RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
(manuf. of polyethylene glycol alkyl ether sulfates with narrow mol. wt. distribution and low dioxane content for liq. **detergents**)

IT 7446-11-9, Sulfur trioxide, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(manuf. of polyethylene glycol alkyl ether sulfates with narrow mol. wt. distribution and low dioxane content for liq. **detergents**)

IT 98-11-3D, Benzenesulfonic acid, alkylated, sodium salts, uses 1643-20-5, Lauryldimethylamine oxide 4292-10-8
RL: TEM (Technical or engineered material use); USES (Uses)
(manuf. of polyethylene glycol alkyl ether sulfates with narrow mol. wt. distribution and low dioxane content for liq. **detergents**)

IT **9004-82-4P 54116-08-4P**
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(oligomeric; manuf. of polyethylene glycol alkyl ether sulfates with narrow mol. wt. distribution and low dioxane content for liq. **detergents**)

L43 ANSWER 4 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
2000:314423 Document No. 132:323321 **Detergent compositions** containing taurate salts. Abe, Koji; Miyahara, Reiji; Nanba, Tomiyuki; Akutsu, Takahiro; Fukuda, Toshio (Shiseido Company Limited, Japan). Eur. Pat. Appl. EP 999260 A2 20000510, 31 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO. (English). CODEN: EPXXDW. APPLICATION: EP 1999-119787 19991006. PRIORITY: JP 1998-285269 19981007; JP 1998-285270 19981007; JP 1998-285271 19981007.

AB The object of the present invention is to provide a **detergent** compn. which foams well and has superior usability without leaving sliminess after use. The present invention is a **detergent** compn. which characteristically contains (1) an alkali metal N-methyltaurate salt or an org. alkali N-methyltaurate salt of N-acylmethyltaurine, N-acyltaurine, alkylsulfuric ester, alkyl ether sulfuric ester, or alkylsulfonic acid; (2) an alkali metal hypotaurate salt or an org. alkali hypotaurate salt of N-acylmethyltaurine, N-acyltaurine, alkylsulfuric ester, alkyl ether sulfuric ester, or alkylsulfonic acid; or (3) an alkali metal taurate salt or an org. alkali taurate salt of N-acylmethyltaurine, N-acyltaurine, alkylsulfuric ester, alkyl ether sulfuric ester, or alkylsulfonic acid.

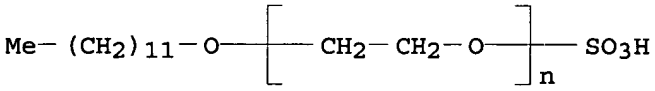
IT **266994-15-4 266994-16-5 266994-25-6 266994-26-7**
RL: TEM (Technical or engineered material use); USES (Uses)
(**detergent** compns. contg. taurate salts)

RN 266994-15-4 HCAPLUS
CN Ethanesulfonic acid, 2-(methylamino)-, monosodium salt, compd. with

α-sulfo-ω-(dodecyloxy)poly(oxy-1,2-ethanediyl) (1:1) (9CI) (CA INDEX NAME)

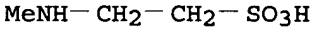
CM 1

CRN 26183-44-8
CMF (C2 H4 O)n C12 H26 O4 S
CCI PMS



CM 2

CRN 4316-74-9
CMF C3 H9 N O3 S . Na

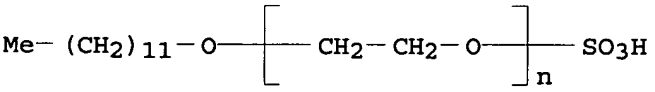


● Na

RN 266994-16-5 HCAPLUS
CN Ethanesulfonic acid, 2-(methylamino)-, compd. with 2,2',2''-nitrilotris[ethanol] and α-sulfo-ω-(dodecyloxy)poly(oxy-1,2-ethanediyl) (1:1:1) (9CI) (CA INDEX NAME)

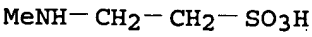
CM 1

CRN 26183-44-8
CMF (C2 H4 O)n C12 H26 O4 S
CCI PMS



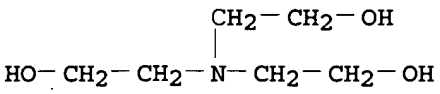
CM 2

CRN 107-68-6
CMF C3 H9 N O3 S



CM 3

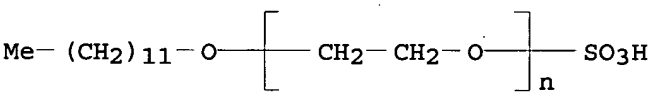
CRN 102-71-6
CMF C6 H15 N O3



RN 266994-25-6 HCAPLUS
CN Ethanesulfonic acid, 2-amino-, monosodium salt, compd. with α-sulfo-ω-(dodecyloxy)poly(oxy-1,2-ethanediyl) (1:1) (9CI) (CA INDEX NAME)

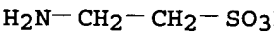
CM 1

CRN 26183-44-8
CMF (C2 H4 O)n C12 H26 O4 S
CCI PMS



CM 2

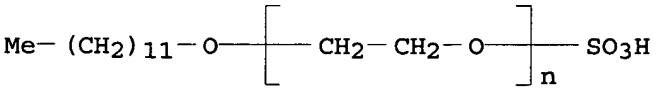
CRN 7347-25-3
CMF C2 H7 N O3 S . Na



RN 266994-26-7 HCAPLUS
CN Ethanesulfonic acid, 2-amino-, compd. with 2,2',2''-nitrilotris[ethanol] and α-sulfo-ω-(dodecyloxy)poly(oxy-1,2-ethanediyl) (1:1:1) (9CI) (CA INDEX NAME)

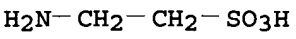
CM 1

CRN 26183-44-8
CMF (C2 H4 O)n C12 H26 O4 S
CCI PMS



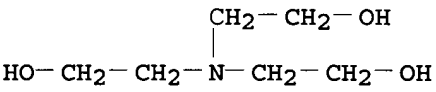
CM 2

CRN 107-35-7
CMF C2 H7 N O3 S



CM 3

CRN 102-71-6
CMF C6 H15 N O3



IC ICM C11D001-88
ICS C11D001-37; C11D001-28
CC **46-3** (Surface Active Agents and Detergents)
ST taurate salt **detergent** foamability
IT **Detergents**
Shampoos
(**detergent** compns. contg. taurate salts)
IT 266994-11-0 266994-12-1 266994-13-2 266994-14-3
266994-15-4 266994-16-5 266994-17-6
266994-18-7 266994-19-8 266994-20-1 266994-21-2 266994-22-3
266994-23-4 266994-24-5 **266994-25-6 266994-26-7**
266994-27-8 266994-28-9 266994-29-0 266994-30-3
RL: TEM (Technical or engineered material use); USES (Uses)
(**detergent** compns. contg. taurate salts)

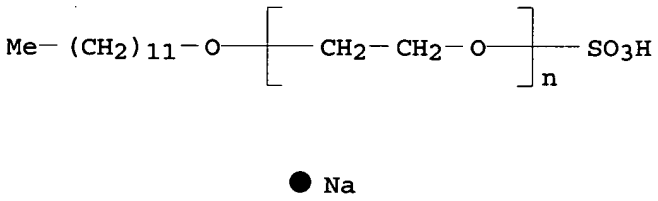
L43 ANSWER 5 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
2000:281194 Document No. 133:6180 Optimization of ATP bioluminescence technique in detection of microbial contamination in **surfactants** and personal hygiene and **detergent formulations.** Gonzalez, X.; Cid, I.; Castan, P.; Prat, A. (Kao Chemicals Europe, S.L., Barbera del Valles, 08210, Spain). Comunicaciones presentadas a la Jornadas del Comite Espanol de la Detergencia, 30, 93-104 (Spanish) 2000. CODEN: CJCDD7. ISSN: 0212-7466. Publisher: Comite Espanol de la Detergencia, Tensioactivos y Afines.
AB **Surfactant** inhibitor effects in detn. of microbial contamination in **detergent** formulations by ATP bioluminescence were resolved by introducing modifications of the

anal. method, i.e., incubation of samples in a neutralizing medium for 3 h. The incubation period does not allow reprodn. but favors bacterial growth and ATP synthesis, which allows for improved detection of microorganisms. Various com. **detergents** were used including formulations contg. sodium laureth sulfate, cocamidopropyl betaine, styrene-acrylate copolymers, sodium lauryl sulfate, Octoxynol-9, liq. **soaps**, etc. The test microorganisms included Pseudomonas aeruginosa, Escherichia coli, Citrobacter freundii, Pseudomonas putida, Serratia marcescens, Enterobacter gergoviae, Serratia rubidaea, Enterobacter amnigenus, Klebsiella pneumoniae, and Pseudomonas fluorescens. With these modifications, it was possible to detect contaminations of about 105 ufc/mL, or even less, if the sample was incubated for a short period of time. This redn. in testing time to a few hours is important in prodn. and trade logistics, for both incoming raw materials and finished goods.

IT **9004-82-4**, Sodium laureth sulfate
RL: AMX (Analytical matrix); ANST (Analytical study)
(incubation time to enhance ATP vol. for detection by bioluminescence in detection of microbial contamination of **detergents** and **soaps**)

RN 9004-82-4 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-(dodecyloxy)-, sodium salt (9CI) (CA INDEX NAME)



CC **46-3** (Surface Active Agents and Detergents)
Section cross-reference(s): 9, 62

ST **detergent** microbial contamination detection ATP bioluminescence; **soap** contamination bacterium incubation growth ATP synthesis

IT Betaines
RL: AMX (Analytical matrix); ANST (Analytical study)
(cocamidopropyl derivs.; incubation time to enhance ATP vol. for detection by bioluminescence in detection of microbial contamination of **detergents** and **soaps**)

IT **Detergents**
Microorganism
Surfactants
(incubation time to enhance ATP vol. for detection by bioluminescence in detection of microbial contamination of **detergents** and **soaps**)

IT **Soaps**
RL: AMX (Analytical matrix); ANST (Analytical study)
(liq.; incubation time to enhance ATP vol. for detection by bioluminescence in detection of microbial contamination of **detergents** and **soaps**)

IT 100-42-5D, Styrene, polymers with acrylates 151-21-3, Sodium lauryl sulfate, analysis **9004-82-4**, Sodium laureth sulfate 9036-19-5, Octoxynol-9
RL: AMX (Analytical matrix); ANST (Analytical study)
(incubation time to enhance ATP vol. for detection by bioluminescence in detection of microbial contamination of **detergents** and **soaps**)

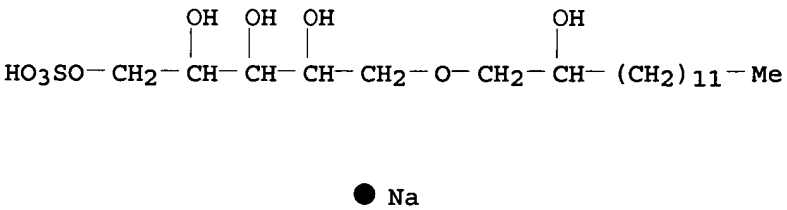
IT 56-65-5, Adenosine 5'-(tetrahydrogen triphosphate), analysis
RL: ANT (Analyte); ANST (Analytical study)
(incubation time to enhance ATP vol. for detection by bioluminescence in detection of microbial contamination of **detergents** and **soaps**)

L43 ANSWER 6 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
2000:233975 Document No. 132:252820 Polyhydric alcohol hydroxyalkyl ether sulfates, anionic **surfactants**, and **detergent compositions** with good biodegradability, foaming property, and low irritation. Takahashi, Masatoshi; Toda, Haruhiko; Yokoi, Kenji (Lion Corp., Japan). Jpn. Kokai Tokkyo Koho JP 2000103777 A2 20000411, 8 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1998-278604 19980930.

AB Title compns., useful for dishes, hair, body, etc., contain R(X)O(A)nOSO3M [R = C6-26 alkyl; X = CH(OH)CH2, C(CH2OH)H; A = C4-8 polyhydric alc. residue; M = H, salt-forming cation; n = 1-5] as anionic **surfactants.** Thus, reaction of hydroxylauryl erythritol ether with Na Et sulfate in the presence of H2SO4 gave 96% hydroxylauryl erythritol ether Na sulfate, which showed good **detergency**, foaming, and low skin irritation.

IT **262845-00-1P 262845-01-2P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(prepn. of hydroxyalkyl polyhydric alc. ether sulfates as anionic **surfactants** for **detergents** with good biodegradability, foaming property, and low irritation)

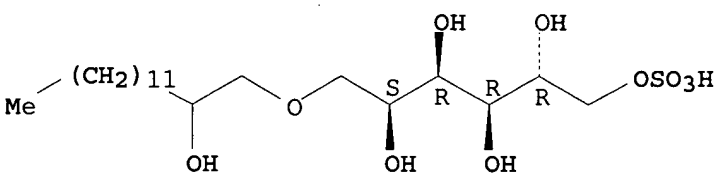
RN 262845-00-1 HCAPLUS
CN Pentitol, 1-O-(2-hydroxytetradecyl)-, 5-(hydrogen sulfate), monosodium salt (9CI) (CA INDEX NAME)



● Na

RN 262845-01-2 HCAPLUS
CN D-Glucitol, 1-O-(2-hydroxytetradecyl)-, 6-(hydrogen sulfate), monosodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● Na

IC ICM C07C305-10
ICS A61K007-075; A61K007-50; C11D001-16
CC **46-3** (Surface Active Agents and Detergents)
Section cross-reference(s): 23
ST polyhydric alc hydroxyalkyl ether sulfate **surfactant**; anionic **surfactant** polyol hydroxyalkyl ether sulfate; hydroxylauryl erythritol ether sulfate **surfactant** **detergent**
IT **Surfactants**
(anionic; prepn. of hydroxyalkyl polyhydric alc. ether sulfates as anionic **surfactants** for **detergents** with good biodegradability, foaming property, and low irritation)
IT Cosmetics
(**cleansing**; prepn. of hydroxyalkyl polyhydric alc. ether sulfates as anionic **surfactants** for **detergents** with good biodegradability, foaming property, and low irritation)
IT **Detergents**
Shampoos
(prepn. of hydroxyalkyl polyhydric alc. ether sulfates as anionic **surfactants** for **detergents** with good biodegradability, foaming property, and low irritation)
IT 262844-99-5P **262845-00-1P** **262845-01-2P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(prepn. of hydroxyalkyl polyhydric alc. ether sulfates as anionic **surfactants** for **detergents** with good biodegradability, foaming property, and low irritation)
IT 262845-02-3 262845-03-4 262845-04-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of hydroxyalkyl polyhydric alc. ether sulfates as anionic **surfactants** for **detergents** with good biodegradability, foaming property, and low irritation)

L43 ANSWER 7 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
1999:271468 Document No. 130:313496 Aqueous and non-aqueous heavy duty liquid **detergent compositions** comprising mid-chain branched **surfactants.** Vinson, Phillip Kyle; Cripe, Thomas Anthony; Scheper, William Michael; Stidham, Robert Emerson; Connor, Daniel Stedham (The Procter & Gamble Company, USA). PCT Int. Appl. WO 9919450 A1 19990422, 94 pp. DESIGNATED STATES: W: BR, CA, CN, CZ, CZ, JP, MX, US; RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (English). CODEN:

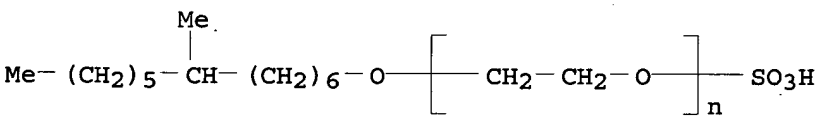
PIXXD2. APPLICATION: WO 1998-US21678 19981014. PRIORITY: US 1997-61924 19971014.

AB Aq. and non-aq., heavy duty liq. laundry **detergent** compns. essentially include a branched **surfactant** mixt. which comprises mid-chain branched and linear **surfactant** compds., the linear compds. being 25-70% of the branched **surfactant** mixt., and a nonaq. or aq. liq. carrier. The mid-chain branched **surfactant** compds. are of the formula: Ab-B, where Ab is a hydrophobic moiety having from about 10 to about 18 total carbons divided between a longest chain and at least one short chain, the longest chain being in the range of from about 9 to about 17 carbon atoms, there being one or more C1-3 alkyl moieties branching from the longest chain, provided that at least one of the branching alkyl moieties is attached directly to a carbon of the longest linear carbon chain at a position within the range of position 3 carbon, counting from carbon #1 which is attached to the - B moiety, to position ω - 2 carbon, wherein ω is the terminal carbon. B is a hydrophilic moiety selected from the group consisting of OSO3M, (EO/PO)mOSO3M, (EO/PO)mOH and mixts. thereof, wherein EO/PO are alkoxy moieties selected from the group consisting of ethoxy, propoxy, and mixts. thereof, wherein m is at least about 0.01 to about 30 and M is hydrogen or a salt forming cation. Provided that the av. total no. of carbon atoms in the Ab moiety in the branched **surfactant** mixt. is within the range of greater than 12 to about 14.5.

IT **223409-08-3P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(aq. and non-aq. heavy duty liq. **detergent** compns. comprising mid-chain branched **surfactants**)

RN 223409-08-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(7-methyltridecyl)oxy]-, sodium salt (9CI) (CA INDEX NAME)



● Na

IC ICM C11D003-39
ICS C11D003-43; C11D001-65; C11D001-835

CC **46-3** (Surface Active Agents and Detergents)

ST midchain branched **surfactant** liq cleaning compn

IT **Surfactants**
(anionic; aq. and non-aq. heavy duty liq. **detergent** compns. comprising mid-chain branched **surfactants**)

IT **Surfactants**
(cationic; aq. and non-aq. heavy duty liq. **detergent** compns. comprising mid-chain branched **surfactants**)

IT Alcohols, uses

RL: TEM (Technical or engineered material use); USES (Uses)
(ethoxylated, mid-chain branched primary; aq. and non-aq. heavy duty liq. **detergent** compns. comprising mid-chain branched **surfactants**)

IT **Detergents**
(nonaq., liq., heavy-duty; aq. and non-aq. heavy duty liq. **detergent** compns. comprising mid-chain branched **surfactants**)

IT **Surfactants**
(nonionic; aq. and non-aq. heavy duty liq. **detergent** compns. comprising mid-chain branched **surfactants**)

IT 68760-65-6P, 6-(Hydroxyhexyl)triphenylphosphonium bromide 223409-05-0P 223409-06-1P 223409-11-8P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(aq. and non-aq. heavy duty liq. **detergent** compns. comprising mid-chain branched **surfactants**)

IT **223409-08-3P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(aq. and non-aq. heavy duty liq. **detergent** compns. comprising mid-chain branched **surfactants**)

IT 603-35-0, Triphenylphosphine, reactions 4286-55-9, 6-Bromo-1-hexanol
RL: RCT (Reactant); RACT (Reactant or reagent)
(aq. and non-aq. heavy duty liq. **detergent** compns. comprising mid-chain branched **surfactants**)

IT 98-11-3D, Benzenesulfonic acid, linear alkyl derivs., sodium salts, uses 7664-93-9D, Sulfuric acid, ethoxylated mid-chain branched primary alkyl esters, sodium salts, uses 7664-93-9D, Sulfuric acid, mid-chain branched primary alkyl esters, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(aq. and non-aq. heavy duty liq. **detergent** compns. comprising mid-chain branched **surfactants**)

L43 ANSWER 8 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
1999:207228 Document No. 130:283710 Nonirritating **surfactants** with excellent solubility in water and **detergent compositions** containing them. Yokoi, Kenji; Takahashi, Masatoshi (Lion Corp., Japan). Jpn. Kokai Tokkyo Koho JP 11080783 A2 19990326 Heisei, 8 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-250056 19970829.

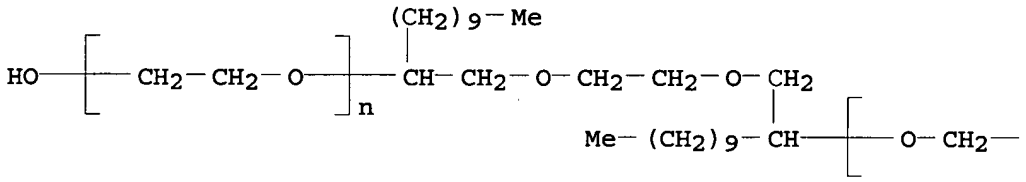
AB The **surfactants** represented by R1CH[O(AO)nX]CH2OR2OCH2CHR1O(AO)nSO3M or R3OCH2CH[O(AO)nX]CH2OR4OCH2CH(CH2OR3)O(AO)nSO3M (R1, R3 = aliph. or arom. group; R2, R4 = bivalent aliph. group; AO = lower alkyleneoxy; X = H, lower alkyl; M = H, salt-forming cation; n = 1-20) are prepd. Thus, 49 g 1,8-bis(decyloxymethyl)-3,6-dioxaoctane-1,8-diol was treated with 59 g ethylene oxide in the presence of KOH and then the resulting product was further treated with SO3 and neutralized with NaOH to give C10H21OCH2CH[O(C2H4O)nH]CH2OC2H4OCH2CH(CH2OC10H21)O(C2H4O)nSO3Na (n = 6.5) showing good soly. in H2O and good stability of its aq. soln. A mild **shampoo** with good foamability was prepd. by the use of the **surfactant.**

IT **222532-73-2P**, Ethoxylated 1,8-didecyl-3,6-dioxaoctane-1,8-diol, monosulfate, sodium salt **222532-74-3P**, Ethoxylated

1,11-didecyl-3,6,9-trioxa-1,11-undecanediol, monosulfate, sodium salt **222532-75-4P**, Ethoxylated 1,11-didodecyl-3,6,9-trioxa-1,11-undecanediol, monoethyl ether, monosulfate, sodium salt
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(nonirritating **surfactants** with good soly. in water for **detergent** compns.)

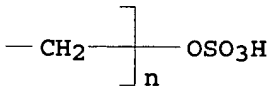
RN 222532-73-2 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), ω-hydroxy-ω'-(sulfooxy)-α,α'-[1,2-ethanediylbis[oxy(1-decyl-2,1-ethanediyl)]]bis-, monosodium salt (9CI) (CA INDEX NAME)

PAGE 1-A



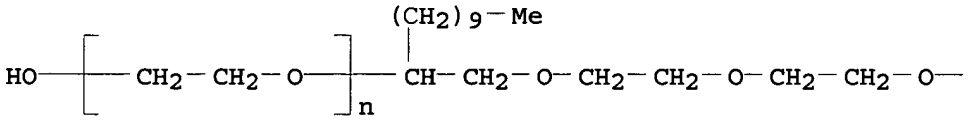
● Na

PAGE 1-B



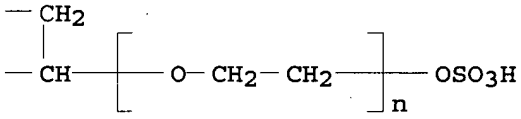
RN 222532-74-3 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), ω-hydroxy-ω'-(sulfooxy)-α,α'-[oxybis[2,1-ethanediyloxy(1-decyl-2,1-ethanediyl)]]bis-, monosodium salt (9CI) (CA INDEX NAME)

PAGE 1-A



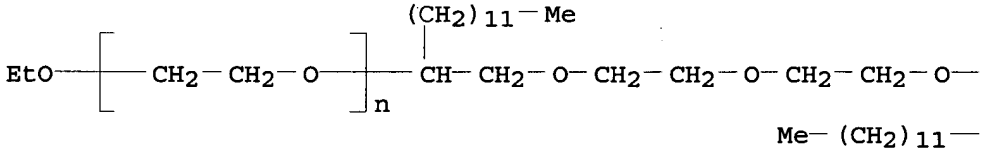
● Na

PAGE 1-B



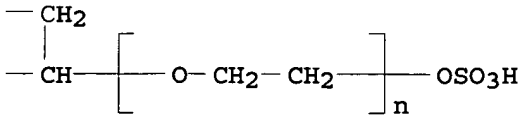
RN 222532-75-4 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), ω-ethoxy-ω'-(sulfooxy)-α,α'-[oxybis[2,1-ethanediyloxy(1-dodecyl-2,1-ethanediyl)]]bis-, sodium salt (9CI) (CA INDEX NAME)

PAGE 1-A



● Na

PAGE 1-B



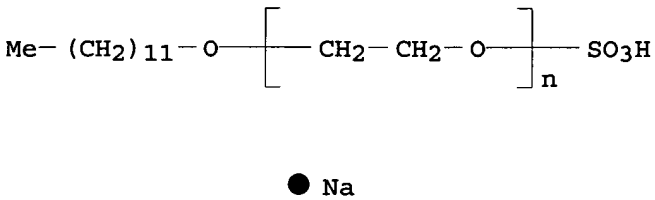
IC ICM C11D001-29
ICS B01F017-04; B01F017-42; A61K007-075; A61K007-50
CC **46-3** (Surface Active Agents and Detergents)
Section cross-reference(s): 62
ST nonirritating **surfactant** polyoxyalkylene sulfate manuf; **shampoo surfactant** polyoxyalkylene sulfate foamability
IT **Detergents**
(dishwashing; nonirritating **surfactants** with good soly. in water for **detergent** compns.)
IT **Shampoos**
Surfactants
(nonirritating **surfactants** with good soly. in water for **detergent** compns.)
IT **222532-73-2P**, Ethoxylated 1,8-didecyl-3,6-dioxaoctane-1,8-diol, monosulfate, sodium salt **222532-74-3P**, Ethoxylated 1,11-didecyl-3,6,9-trioxa-1,11-undecanediol, monosulfate, sodium salt **222532-75-4P**, Ethoxylated 1,11-didodecyl-3,6,9-trioxa-1,11-undecanediol, monoethyl ether, monosulfate, sodium salt 222532-76-5P, Ethoxylated 1,8-bis(decyloxymethyl)-3,6-dioxaoctane-1,8-diol, monosulfate, sodium salt 222532-77-6P, Ethoxylated 1,11-bis(dodecyloxymethyl)-3,6,9-trioxa-1,11-undecanediol, monoethyl ether, monosulfate, sodium salt 222532-78-7P, Ethoxylated 1,11-bis(dodecyloxymethyl)-3,6,9-trioxa-1,11-undecanediol, monosulfate, sodium salt 222622-43-7P, Ethoxylated propoxylated 1,9-didodecyl-3,7-dioxanonane-1,9-diol, monosulfate, sodium salt 222622-46-0P, Ethoxylated propoxylated 1,8-bis(octyloxymethyl)-3,6-dioxaoctane-1,8-diol, monosulfate, sodium salt
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(nonirritating **surfactants** with good soly. in water for **detergent** compns.)

L43 ANSWER 9 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
1999:106949 Document No. 130:198155 Preparation of (amidoalkyl)amino carboxylic acids and **surfactant** and **detergent compositions** containing them. Wakui, Tsugio; Kawashima, Akiko; Okano, Tomomichi; Nishida, Shigeo (Lion Akzo K. K., Japan; Lion Corp.). Jpn. Kokai Tokkyo Koho JP 11035537 A2 19990209 Heisei, 9 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1997-194213 19970718.
AB RCONH(CH2)mNH(CH2)nCO2M (I; R = C5-21 alkyl, alkenyl; m = 2-8; n = 1-2; M = H, alkali metal, NH4, C2-3 alkanol- or C1-5 alkyl-substituted ammonium, basic amino acid) are prepd. by ring opening of cyclic amidines (prepd. from aliph. nitriles and diamines) in the presence of H2O, reaction with (a) halo carboxylic acids or their salts, (b) acrylic acid lower alc. esters, or (c) acrylonitrile, and optional hydrolysis. Thus, 2-undecyl-4,5-dihydroimidazole was heated in aq. EtOH at 80° for 2 h and treated with ClCH2CO2Na in the presence of NaOH for 4.5 h to give I (R = C11H23, m = 2, n = 1, M = Na), 10 parts of which was mixed with 5 parts polyoxyethylene lauryl ether and H2O to 100 parts to give a compn. showing good fluidity, transparency, foamability, and **detergency** and no skin irritation.
IT **9004-82-4**, Polyoxyethylene lauryl ether sodium sulfate

RL: TEM (Technical or engineered material use); USES (Uses)
(prepn. of (amidoalkyl)amino carboxylic acids as **surfactants** for **detergents** contg.)

RN 9004-82-4 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-(dodecyloxy)-, sodium salt (9CI) (CA INDEX NAME)



IC ICM C07C233-36
ICS C07C231-12; C07C233-38; C11D001-10

CC **46-3** (Surface Active Agents and Detergents)
Section cross-reference(s): 23, 62

ST amidoalkylamino carboxylic acid prepn **surfactant** **detergent**

IT Nitriles, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(aliph.; prepn. of (amidoalkyl)amino carboxylic acids as **surfactants** for **detergents**)

IT **Surfactants**
(amphoteric; prepn. of (amidoalkyl)amino carboxylic acids as **surfactants** for **detergents**)

IT **Surfactants**
(anionic; prepn. of (amidoalkyl)amino carboxylic acids as **surfactants** for **detergents** contg.)

IT Amidines
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(cyclic; prepn. of (amidoalkyl)amino carboxylic acids as **surfactants** for **detergents**)

IT Amines, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(diamines; prepn. of (amidoalkyl)amino carboxylic acids as **surfactants** for **detergents**)

IT Carboxylic acids, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(halo; prepn. of (amidoalkyl)amino carboxylic acids as **surfactants** for **detergents**)

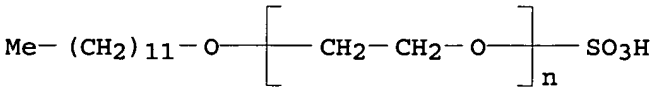
IT Ring opening
(in prepn. of (amidoalkyl)amino carboxylic acids as **surfactants** for **detergents**)

IT **Detergents**
(prepn. of (amidoalkyl)amino carboxylic acids as **surfactants** for **detergents**)

IT 10443-61-5P 46843-77-0P 88097-29-4P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of (amidoalkyl)amino carboxylic acids as

surfactants for **detergents**)
IT 220834-33-3P
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of (amidoalkyl)amino carboxylic acids as **surfactants** for **detergents**)
IT 220834-30-0P 220834-31-1P 220834-32-2P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(prepn. of (amidoalkyl)amino carboxylic acids as **surfactants** for **detergents**)
IT 107-13-1, 2-Propenenitrile, reactions 107-15-3, Ethylenediamine, reactions 109-76-2, 1,3-Propanediamine 140-88-5 629-63-0, Myristonitrile 2437-25-4, Lauronitrile 3926-62-3, Sodium monochloroacetate
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of (amidoalkyl)amino carboxylic acids as **surfactants** for **detergents**)
IT **9004-82-4**, Polyoxyethylene lauryl ether sodium sulfate 29963-33-5, Sodium α-tetradecenesulfonate
RL: TEM (Technical or engineered material use); USES (Uses)
(prepn. of (amidoalkyl)amino carboxylic acids as **surfactants** for **detergents** contg.)

L43 ANSWER 10 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
1998:221078 Document No. 128:245472 Mild cleansing bar **compositions.** Jaworski, Robert J.; Park, Debra A. (Dial Corp., USA). PCT Int. Appl. WO 9814559 A1 19980409, 26 pp. DESIGNATED STATES: W: CA, GB, ID, IL, KR, MX. (English). CODEN: PIXXD2. APPLICATION: WO 1997-US17993 19971002. PRIORITY: US 1996-726089 19961004.
AB A transparent cleansing bar compn. comprises 10-45% of a synthetic **detergent** with a major portion of the **detergent** being a sulfated ethoxylated long chain alkyl alc. of the formula R(OCH2CH2)nSO3X wherein R is an alkyl group having 12-16 carbon atoms, n is 2 or 3, and X is an alkali metal or alk. earth metal; 10-30% of a polyhydric alc. H(OCH2CH2)nOH wherein n has an av. value of 6 to 16; 15-30% of a water sol. **soap**, wherein the ratio of the **soap** to the synthetic **detergent** ranges 1:1 to about 1:2; 5-20% of a fatty acid alkanolamide; 0-15% of an alkyl sarcosinic acid RCONMeCHCO2H, where R is alkyl having 10 to 16 carbon atoms; and 0-10% of a nonionic alkyl polyglycoside with the compn. having a pH of ≥7.5.
IT **9004-82-4**, Sodium laureth-3 sulfate
RL: TEM (Technical or engineered material use); USES (Uses)
(mild **cleansing** bar compns.)
RN 9004-82-4 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-(dodecyloxy)-, sodium salt (9CI) (CA INDEX NAME)



● Na

IC ICM C11D017-00
ICS C11D015-04; C11D009-22
CC **46-3** (Surface Active Agents and Detergents)
ST mild cleansing bar compn; sulfated ethoxylated alc **detergent** ; polyhydric alc cleansing bar; fatty acid alkanolamide cleansing bar; alkyl sarcosinic acid cleansing bar; polyglycoside alkyl cleansing bar
IT Alcohols, uses
Alcohols, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(C16-18, ethoxylated; mild **cleansing** bar compns.)
IT Amides, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(N-(hydroxyalkyl); mild **cleansing** bar compns.)
IT Glycosides
RL: TEM (Technical or engineered material use); USES (Uses)
(alkyl polyglycosides; mild **cleansing** bar compns.)
IT Glycerides, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(almond, ethoxylated; mild **cleansing** bar compns.)
IT **Soaps**
RL: TEM (Technical or engineered material use); USES (Uses)
(bars, transparent; mild **cleansing** bar compns.)
IT Amides, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(coco, N,N-bis(hydroxyethyl); mild **cleansing** bar compns.)
IT Alcohols, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(ethoxylated, sulfated; mild **cleansing** bar compns.)
IT Polyoxyalkylenes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(mild **cleansing** bar compns.)
IT Alcohols, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polyhydric; mild **cleansing** bar compns.)
IT 50-70-4, Sorbitol, uses 56-81-5, Glycerin, uses 57-11-4, Stearic acid, uses 57-55-6, Propylene glycol, uses 65-85-0D, Benzoic acid, esters with C12-15 alcs., uses 77-92-9, Citric acid, uses 107-43-7D, Betaine, cocoamidopropyl 107-97-1D, Sarcosinic acid, cocoyl 107-97-1D, Sarcosinic acid, cocoyl, cocamide diethanolamides 136-26-5, Capramide DEA 137-16-6, Sodium lauroyl sarcosinate 334-48-5, Capric acid 822-16-2, Sodium stearate 1562-00-1D, Sodium isethionate, cocoyl derivs., sodium salts **9004-82-4**, Sodium laureth-3 sulfate 25322-68-3, Polyethylene glycol 72300-24-4 106392-12-5, Pluronic F108

148619-01-6, Plantaren 2000
RL: TEM (Technical or engineered material use); USES (Uses)
(mild **cleansing** bar compns.)

L43 ANSWER 11 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
1997:696832 Document No. 127:347940 Mid-chain branched primary alkyl alkoxylated sulfate **surfactants**, **mixtures** thereof, and **detergent compositions** containing them. Connor, Daniel Stedman; Cripe, Thomas Anthony; Vinson, Phillip Kyle; Willman, Kenneth William; Burckett-St. Laurent, James Charles T. R. (Procter and Gamble Company, USA; Connor, Daniel Stedman; Cripe, Thomas Anthony; Vinson, Phillip Kyle; Willman, Kenneth William; Burckett-St. Laurent, James Charles T. R.). PCT Int. Appl. WO 9739087 A1 19971023, 114 pp. DESIGNATED STATES: W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 1997-US6471 19970416. PRIORITY: US 1996-15521 19960416; US 1996-15523 19960416; US 1996-32035 19961126.

AB Title **surfactants** CH3CH2(CH2)wCRH(CH2)xCR1H(CH2)yCR2H(CH2)z(EO/PO)mOSO3M, [total C atoms = 14-20 (including R, R1, and R2 but excluding the EO/PO moiety); R-R2 = H, C1-3 alkyl; when z = 1 R or R1 ≠ H; M is ≥1 cation; w, x, y = 0-13; z = ≥1; w + x + y + z = 8-14; m ≥0.01]; CH3CH2(CH2)xCR1H(CH2)yCR2H(CH2)z(EO/PO)mOSO3M [R1, R2 = H, C1-3 alkyl (both cannot be H); M = water-sol. cation; x, y, = 0-12; z ≥2; x + y + z = 11-14; m ≥0.01]; CH3(CH2)aCHMe(CH2)bCH2(EO/PO)mOSO3M [M = Na, K, Mg, (substituted) ammonium; a = 2-11; b = 1-10; a + b = 12 or 13; m ≥0.01]; etc.; are useful in laundry and cleaning compns., esp. granular and liq. **detergent** compns. used at low water temp.

IT **198082-04-1D**, salts **198082-05-2D**, salts
198082-06-3D, salts **198082-07-4D**, salts
198082-08-5D, salts **198082-09-6D**, salts
198082-10-9D, salts **198082-11-0D**, salts
198082-12-1D, salts **198082-13-2D**, salts
198082-14-3D, salts **198082-15-4D**, salts
198082-16-5D, salts **198082-17-6D**, salts
198082-18-7D, salts **198082-19-8D**, salts
198082-20-1D, salts **198082-21-2D**, salts
198082-22-3D, salts **198082-23-4D**, salts
198082-24-5D, salts **198082-25-6D**, salts
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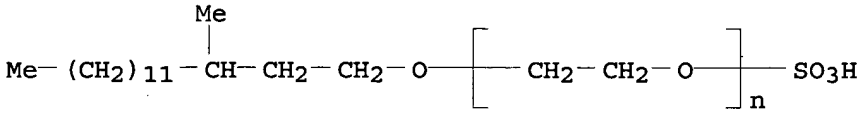
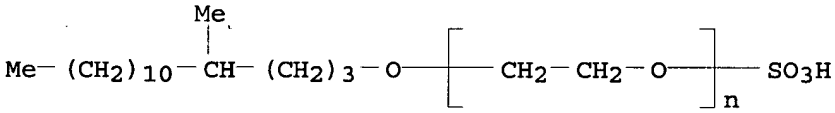
198082-28-9D, salts **198082-29-0D**, salts
198082-30-3D, salts **198082-31-4D**, salts
198082-32-5D, salts **198082-33-6D**, salts
198082-34-7D, salts **198082-35-8D**, salts
198082-36-9D, salts **198082-37-0D**, salts
198082-38-1D, salts **198082-39-2D**, salts
198082-40-5D, salts **198082-41-6D**, salts
198082-42-7D, salts **198082-43-8D**, salts
198082-44-9D, salts **198082-45-0D**, salts

198082-46-1D, salts **198082-47-2D**, salts
RL: TEM (Technical or engineered material use); USES (Uses)
(mid-chain branched primary alkyl alkoxylated sulfate **surfactants** for **cleaning** compns.)

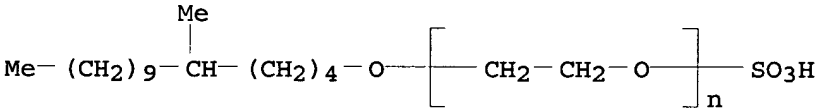
RN 198082-04-1 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(3-methylpentadecyl)oxy]- (9CI) (CA INDEX NAME)



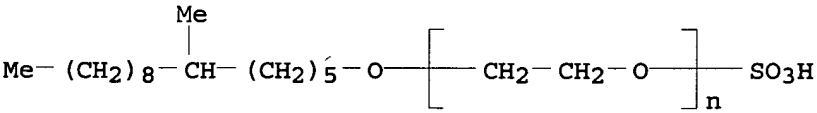
RN 198082-05-2 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(4-methylpentadecyl)oxy]- (9CI) (CA INDEX NAME)



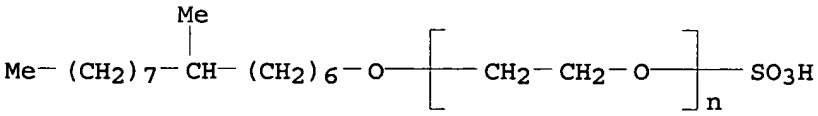
RN 198082-06-3 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(5-methylpentadecyl)oxy]- (9CI) (CA INDEX NAME)



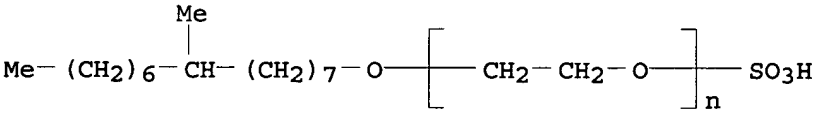
RN 198082-07-4 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(6-methylpentadecyl)oxy]- (9CI) (CA INDEX NAME)



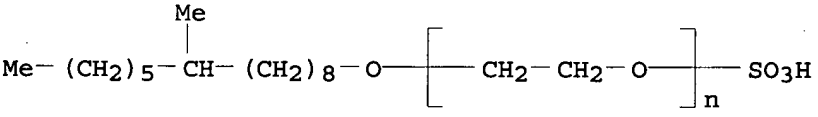
RN 198082-08-5 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(7-methylpentadecyl)oxy]- (9CI) (CA INDEX NAME)



RN 198082-09-6 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(8-methylpentadecyl)oxy]- (9CI) (CA INDEX NAME)



RN 198082-10-9 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(9-methylpentadecyl)oxy]- (9CI) (CA INDEX NAME)



RN 198082-11-0 HCAPLUS
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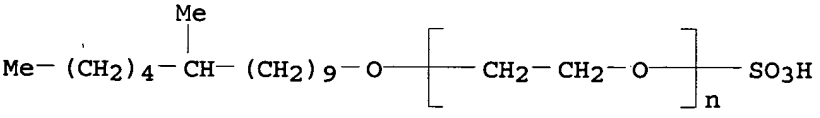
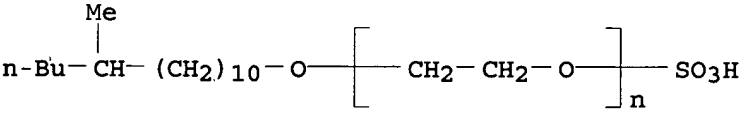
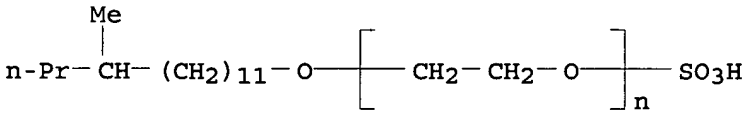


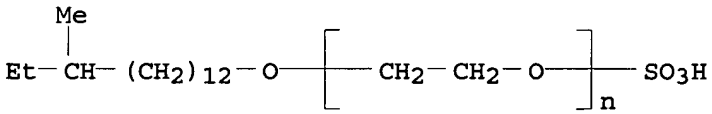
RN 198082-12-1 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(11-methylpentadecyl)oxy]- (9CI) (CA INDEX NAME)



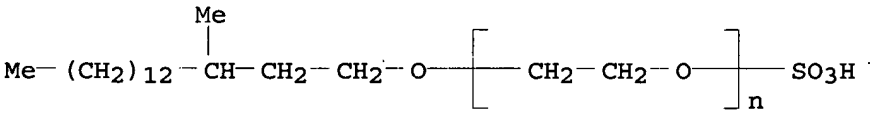
RN 198082-13-2 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(12-methylpentadecyl)oxy]- (9CI) (CA INDEX NAME)



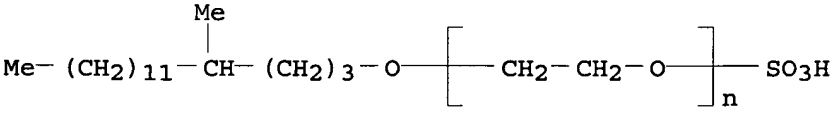
RN 198082-14-3 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(13-methylpentadecyl)oxy]- (9CI) (CA INDEX NAME)



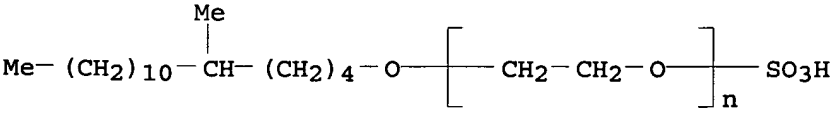
RN 198082-15-4 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(3-methylhexadecyl)oxy]- (9CI) (CA INDEX NAME)



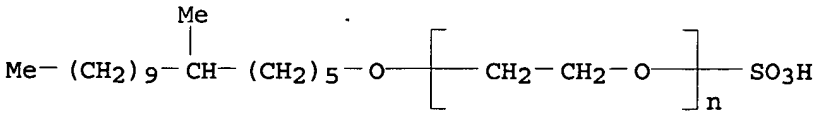
RN 198082-16-5 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(4-methylhexadecyl)oxy]- (9CI) (CA INDEX NAME)



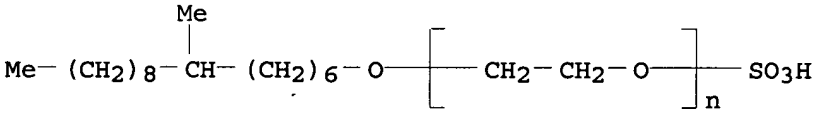
RN 198082-17-6 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(5-methylhexadecyl)oxy]- (9CI) (CA INDEX NAME)



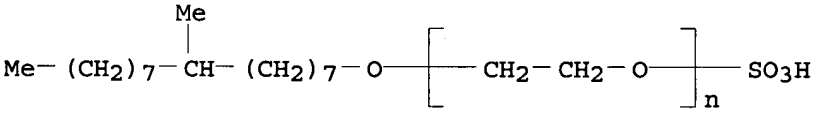
RN 198082-18-7 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(6-methylhexadecyl)oxy]- (9CI) (CA INDEX NAME)



RN 198082-19-8 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(7-methylhexadecyl)oxy]- (9CI) (CA INDEX NAME)



RN 198082-20-1 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(8-methylhexadecyl)oxy]- (9CI) (CA INDEX NAME)



RN 198082-21-2 HCAPLUS
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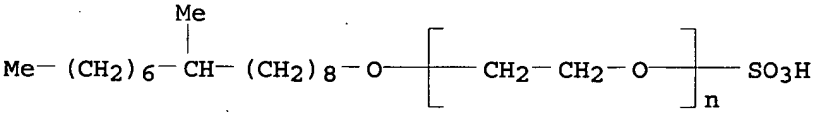

RN 198082-22-3 HCAPLUS
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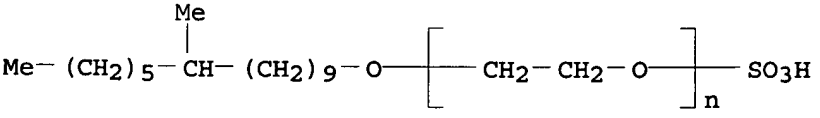
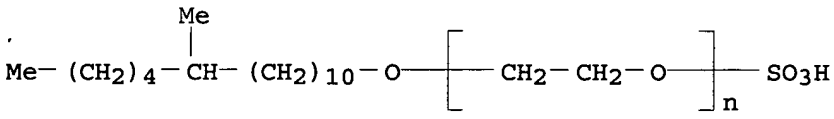
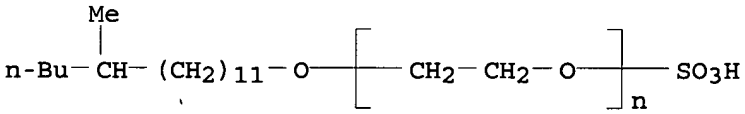


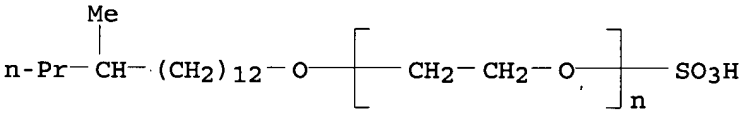
RN 198082-23-4 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(11-methylhexadecyl)oxy]- (9CI) (CA INDEX NAME)



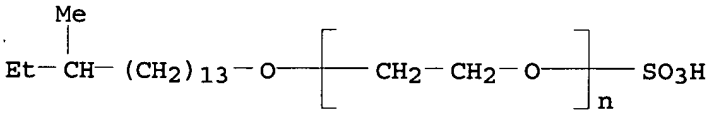
RN 198082-24-5 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(12-methylhexadecyl)oxy]- (9CI) (CA INDEX NAME)



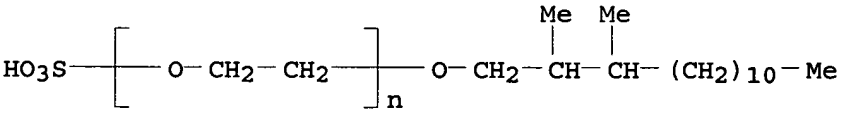
RN 198082-25-6 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(13-methylhexadecyl)oxy]- (9CI) (CA INDEX NAME)



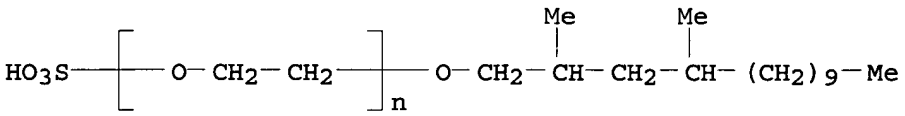
RN 198082-26-7 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(14-methylhexadecyl)oxy]- (9CI) (CA INDEX NAME)



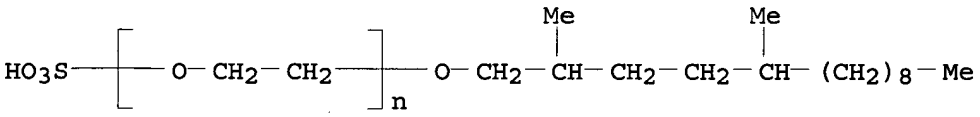
RN 198082-27-8 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(2,3-dimethyltetradecyl)oxy]- (9CI) (CA INDEX NAME)



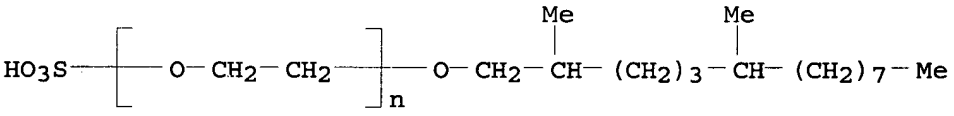
RN 198082-28-9 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(2,4-dimethyltetradecyl)oxy]- (9CI) (CA INDEX NAME)



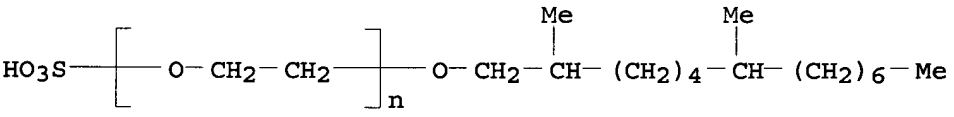
RN 198082-29-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(2,5-dimethyltetradecyl)oxy]- (9CI) (CA INDEX NAME)



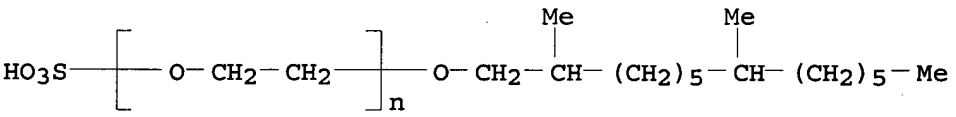
RN 198082-30-3 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(2,6-dimethyltetradecyl)oxy]- (9CI) (CA INDEX NAME)



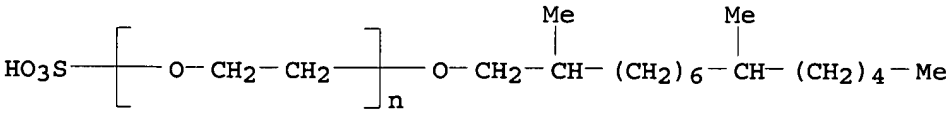
RN 198082-31-4 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(2,7-dimethyltetradecyl)oxy]- (9CI) (CA INDEX NAME)



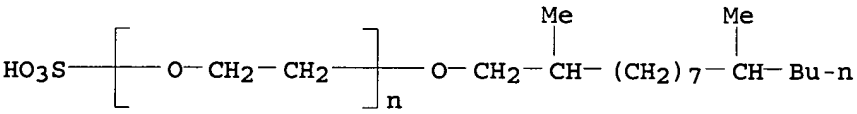
RN 198082-32-5 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(2,8-dimethyltetradecyl)oxy]- (9CI) (CA INDEX NAME)



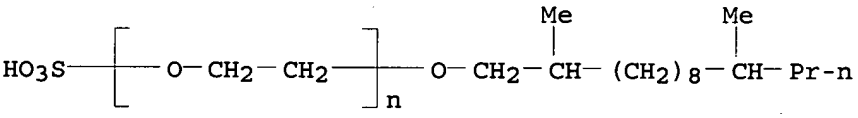
RN 198082-33-6 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(2,9-dimethyltetradecyl)oxy]- (9CI) (CA INDEX NAME)



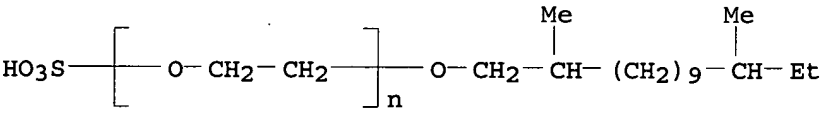
RN 198082-34-7 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(2,10-dimethyltetradecyl)oxy]- (9CI) (CA INDEX NAME)



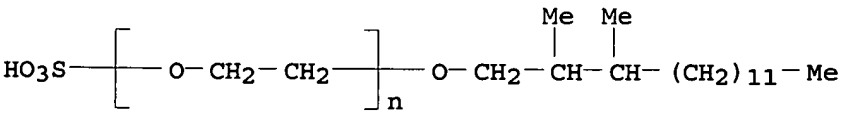
RN 198082-35-8 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(2,11-dimethyltetradecyl)oxy]- (9CI) (CA INDEX NAME)



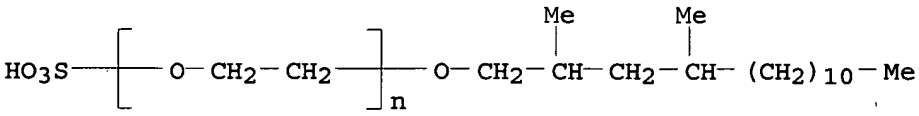
RN 198082-36-9 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(2,12-dimethyltetradecyl)oxy]- (9CI) (CA INDEX NAME)



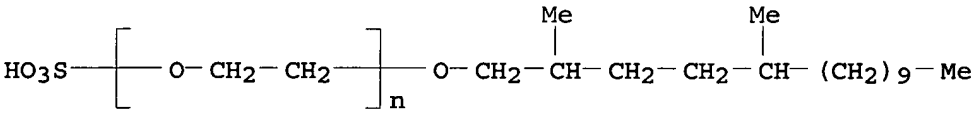
RN 198082-37-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(2,3-dimethylpentadecyl)oxy]- (9CI) (CA INDEX NAME)



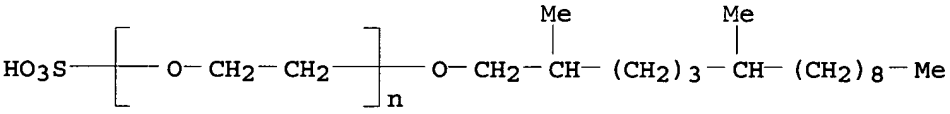
RN 198082-38-1 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(2,4-dimethylpentadecyl)oxy]- (9CI) (CA INDEX NAME)



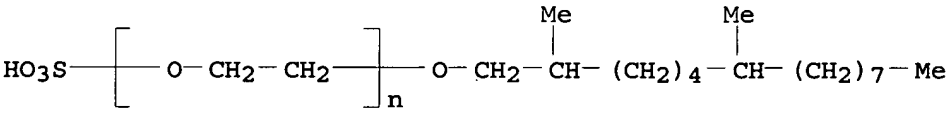
RN 198082-39-2 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(2,5-dimethylpentadecyl)oxy]- (9CI) (CA INDEX NAME)



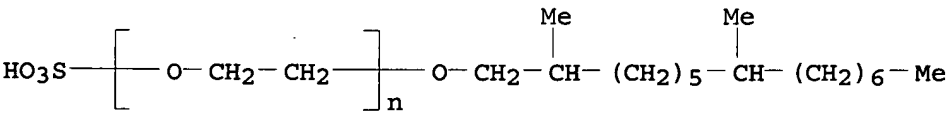
RN 198082-40-5 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(2,6-dimethylpentadecyl)oxy]- (9CI) (CA INDEX NAME)



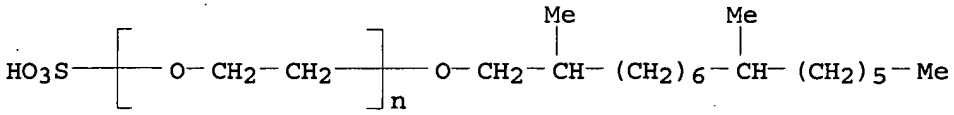
RN 198082-41-6 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(2,7-dimethylpentadecyl)oxy]- (9CI) (CA INDEX NAME)



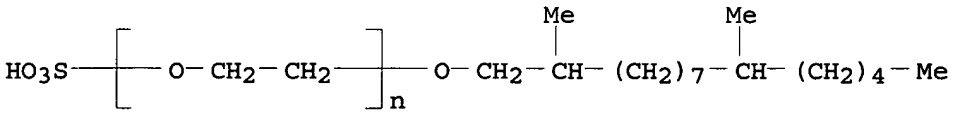
RN 198082-42-7 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(2,8-dimethylpentadecyl)oxy]- (9CI) (CA INDEX NAME)



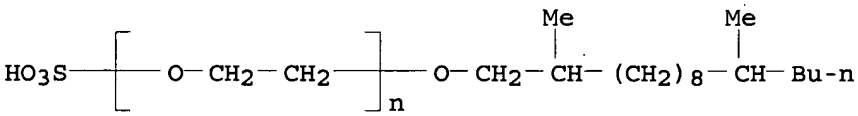
RN 198082-43-8 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(2,9-dimethylpentadecyl)oxy]- (9CI) (CA INDEX NAME)



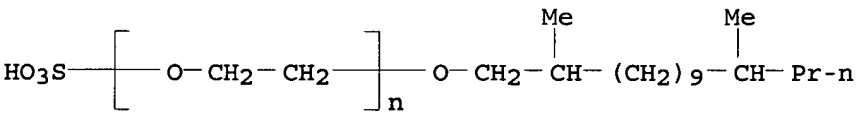
RN 198082-44-9 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(2,10-dimethylpentadecyl)oxy]- (9CI) (CA INDEX NAME)



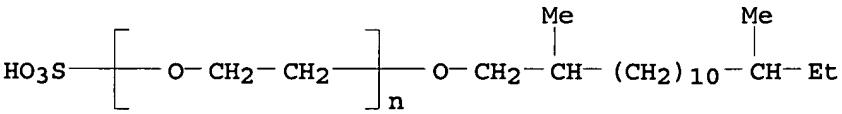
RN 198082-45-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(2,11-dimethylpentadecyl)oxy]- (9CI) (CA INDEX NAME)



RN 198082-46-1 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(2,12-dimethylpentadecyl)oxy]- (9CI) (CA INDEX NAME)

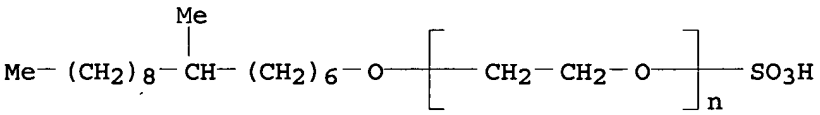


RN 198082-47-2 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(2,13-dimethylpentadecyl)oxy]- (9CI) (CA INDEX NAME)

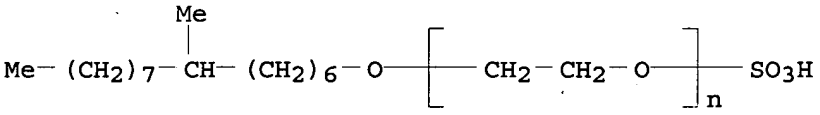


IT **198080-23-8P 198080-24-9P 198080-25-0P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(prepn. of; mid-chain branched primary alkyl alkoxylated sulfate **surfactants** for **cleaning** compns.)
RN 198080-23-8 HCAPLUS

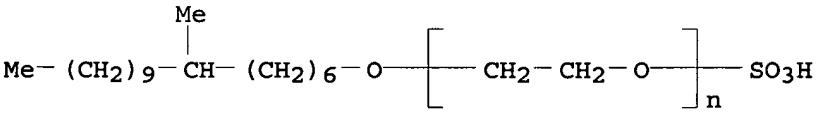
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(7-methylhexadecyl)oxy]-, sodium salt (9CI) (CA INDEX NAME)



RN 198080-24-9 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(7-methylpentadecyl)oxy]-, sodium salt (9CI) (CA INDEX NAME)



RN 198080-25-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(7-methylheptadecyl)oxy]-, sodium salt (9CI) (CA INDEX NAME)



IC ICM C11D001-14
ICS C11D001-29; C07C305-06; C07C305-10
CC **46-3** (Surface Active Agents and Detergents)
ST **surfactant** branched primary alkyl alkoxylate sulfate; cleaning compn branched alkyl alkoxylate **surfactant**; **detergent** branched alkyl alkoxylate **surfactant**
IT **Detergents**
(dishwashing, granular; mid-chain branched primary alkyl alkoxylated sulfate **surfactants** for **cleaning** compns.)
IT **Detergents**
Detergents

(dishwashing, liq.; mid-chain branched primary alkyl alkoxylated sulfate **surfactants** for **cleaning** compns.)

IT Alcohols, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(ethoxylated, C14-20, sodium sulfates; mid-chain branched primary alkyl alkoxylated sulfate **surfactants** for **cleaning** compns.)

IT **Detergents**
(**laundry**, liq.; mid-chain branched primary alkyl alkoxylated sulfate **surfactants** for **cleaning** compns.)

IT **Detergents**
(**laundry**; mid-chain branched primary alkyl alkoxylated sulfate **surfactants** for **cleaning** compns.)

IT **Detergents**
(mid-chain branched primary alkyl alkoxylated sulfate **surfactants** for **cleaning** compns.)

IT **198082-04-1D**, salts **198082-05-2D**, salts **198082-06-3D**, salts **198082-07-4D**, salts **198082-08-5D**, salts **198082-09-6D**, salts **198082-10-9D**, salts **198082-11-0D**, salts **198082-12-1D**, salts **198082-13-2D**, salts **198082-14-3D**, salts **198082-15-4D**, salts **198082-16-5D**, salts **198082-17-6D**, salts **198082-18-7D**, salts **198082-19-8D**, salts **198082-20-1D**, salts **198082-21-2D**, salts **198082-22-3D**, salts **198082-23-4D**, salts **198082-24-5D**, salts **198082-25-6D**, salts **198082-26-7D**, salts **198082-27-8D**, salts **198082-28-9D**, salts **198082-29-0D**, salts **198082-30-3D**, salts **198082-31-4D**, salts **198082-32-5D**, salts **198082-33-6D**, salts **198082-34-7D**, salts **198082-35-8D**, salts **198082-36-9D**, salts **198082-37-0D**, salts **198082-38-1D**, salts **198082-39-2D**, salts **198082-40-5D**, salts **198082-41-6D**, salts **198082-42-7D**, salts **198082-43-8D**, salts **198082-44-9D**, salts **198082-45-0D**, salts **198082-46-1D**, salts **198082-47-2D**, salts
RL: TEM (Technical or engineered material use); USES (Uses)
(mid-chain branched primary alkyl alkoxylated sulfate **surfactants** for **cleaning** compns.)

IT 7740-48-9P 198079-67-3P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and alkoxylation of; in prepn. of mid-chain branched primary alkyl alkoxylated sulfate **surfactants** for **cleaning** compns.)

IT 68760-65-6P, (6-Hydroxyhexyl)triphenylphosphonium bromide 198218-62-1P 198218-63-2P 198218-64-3P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction of; in prepn. of mid-chain branched primary alkyl alkoxylated sulfate **surfactants** for **cleaning** compns.)

IT **198080-23-8P 198080-24-9P 198080-25-0P**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(prepn. of; mid-chain branched primary alkyl alkoxylated sulfate **surfactants** for **cleaning** compns.)

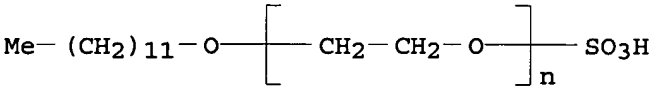
IT 112-12-9, 2-Undecanone 603-35-0, Triphenylphosphine, reactions 693-54-9, 2-Decanone 4286-55-9, 6-Bromo-1-hexanol 6175-49-1, 2-Dodecanone 7790-94-5, Chlorosulfonic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of; in prepn. of mid-chain branched primary alkyl alkoxylated sulfate **surfactants** for **cleaning** compns.)

L43 ANSWER 12 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
1997:400484 Document No. 127:96837 Liquid **detergent compositions** comprising salts of α-sulfonated fatty acid methyl esters, and anionic **surfactants.** Sajic, Branko; Ryklin, Irma; Frank, Brian L.; Rao, Y. Kameshwer (Stepan Company, USA). U.S. US 5637758 A 19970610, 18 pp., Cont.-in-part of U.S. Ser. No. 135,288. (English). CODEN: USXXAM. APPLICATION: US 1995-486360 19950607. PRIORITY: US 1993-135288 19931012.

AB The title **detergent** compns. contain a mixt. of **surfactants** comprising: (a) a **hydrotropic surfactant** which is a blend of a mono-salt of an α-sulfonated Me or Et ester of a fatty acid having from 12-16 carbon atoms and a di-salt of an α-sulfonated fatty acid, the ratio of mono-salt to di-salt being at least about 2:1; (b) an anionic **surfactant**; (c) an auxiliary foam stabilizing **surfactant**; and (d) a divalent cation selected from Ca++ and Mg++, where the amt. of **surfactant** present in the compn. as a salt of the divalent cation is at least 30% of the mixt. of **surfactants**, the wt. ratio of the **hydrotropic surfactant** to anionic **surfactant** is 1:1.5-1:8, and the amt. of the mixt. of **surfactants** in the compn. is 20-90%. The **detergent** compns. comprise crit. amts. of divalent cations and a min. amt. of the mixt. of a salt of α-sulfonated Me ester of a fatty acid, anionic **surfactants** and foam stabilizing auxiliary **surfactants.**

IT **32612-48-9**, Steol CA460
RL: TEM (Technical or engineered material use); USES (Uses)
(liq. **detergent** compns. comprising salts of α-sulfonated fatty acid Me esters, and anionic **surfactants**)

RN 32612-48-9 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-(dodecyloxy)-, ammonium salt (9CI) (CA INDEX NAME)



IC ICM C07C321-14
INCL 560147000
CC **46-3** (Surface Active Agents and Detergents)
ST liq **detergent** sulfonated fatty acid; anionic **surfactant** liq **detergent**; **hydrotropic surfactant** liq **detergent**
IT Sulfonic acids, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(1-alkene, salts; liq. **detergent** compns. comprising salts of α-sulfonated fatty acid Me esters, and anionic **surfactants**)
IT Amides, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(C12-14, N-(hydroxyethyl), Ninol LMP; liq. **detergent** compns. comprising salts of α-sulfonated fatty acid Me esters, and anionic **surfactants**)
IT Alcohols, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(C9-11, ethoxylated; liq. **detergent** compns. comprising salts of α-sulfonated fatty acid Me esters, and anionic **surfactants**)
IT Sulfonates
RL: TEM (Technical or engineered material use); USES (Uses)
(alkanesulfonates; liq. **detergent** compns. comprising salts of α-sulfonated fatty acid Me esters, and anionic **surfactants**)
IT Glycosides
RL: TEM (Technical or engineered material use); USES (Uses)
(alkyl polyglycosides; liq. **detergent** compns. comprising salts of α-sulfonated fatty acid Me esters, and anionic **surfactants**)
IT Fatty acids, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(alpha-sulfonated, esters; liq. **detergent** compns. comprising salts of α-sulfonated fatty acid Me esters, and anionic **surfactants**)
IT **Surfactants**
(anionic; liq. **detergent** compns. comprising salts of α-sulfonated fatty acid Me esters, and anionic **surfactants**)
IT Amides, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(coco, N-(hydroxyethyl), Ninol 40CO; liq. **detergent** compns. comprising salts of α-sulfonated fatty acid Me esters, and anionic **surfactants**)
IT Alcohols, uses

Amides, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(fatty; liq. **detergent** compns. comprising salts of α-sulfonated fatty acid Me esters, and anionic **surfactants**)

IT **Surfactants**
(**hydrotropic**; liq. **detergent** compns. comprising salts of α-sulfonated fatty acid Me esters, and anionic **surfactants**)

IT **Detergents**
(liq. **detergent** compns. comprising salts of α-sulfonated fatty acid Me esters, and anionic **surfactants**)

IT Betaines
Sulfobetaines
RL: TEM (Technical or engineered material use); USES (Uses)
(liq. **detergent** compns. comprising salts of α-sulfonated fatty acid Me esters, and anionic **surfactants**)

IT Amine oxides
RL: TEM (Technical or engineered material use); USES (Uses)
(long-chain; liq. **detergent** compns. comprising salts of α-sulfonated fatty acid Me esters, and anionic **surfactants**)

IT Fatty acids, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(sulfo, salt; liq. **detergent** compns. comprising salts of α-sulfonated fatty acid Me esters, and anionic **surfactants**)

IT 98-11-3D, Benzenesulfonic acid, alkyl derivs., salts, uses 142-58-5, Myristic acid monoethanolamide 142-78-9, Lauric acid monoethanolamide 627-83-8, Ethylene glycol distearate 693-33-4 1300-72-7, Sodium xylene sulfonate 1309-42-8, Magnesium hydroxide 1643-20-5, Ammonyx LO 1847-58-1, Sodium lauryl sulfo acetate 7487-88-9, Magnesium sulfate, uses 7664-93-9D, Sulfuric acid, alkyl esters, sodium salts, uses 7786-30-3, Magnesium chloride, uses 28348-53-0, Sodium cumene sulfonate **32612-48-9**, Steol CA460 106716-27-2, Amphosol CA 156014-44-7, Glucopon 625 163663-07-8, Alpha-Step MC 48
RL: TEM (Technical or engineered material use); USES (Uses)
(liq. **detergent** compns. comprising salts of α-sulfonated fatty acid Me esters, and anionic **surfactants**)

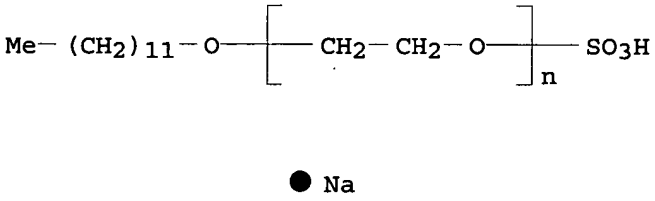
L43 ANSWER 13 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
1997:257267 Document No. 126:239884 Polyoxyethylene sulfate-based cleaner **composition.** Betsupu, Koji; Komya, Kaoru (Asahi Denka Kogyo KK, Japan). Jpn. Kokai Tokkyo Koho JP 09040994 A2 19970210 Heisei, 5 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1995-195399 19950731.

AB Alkyl benzenesulfonate anionic **surfactant**-free cleaning compns. contain (A) 5-25% polyoxyethylene alkyl (alkenyl) ether sulfate salt and (B) 5-15% nonionic **surfactants**, and the compn. contains ≥15% **surfactants** and has A/B ratio 0.5-2/1. A compn. contained polyoxyethylene lauryl ether sulfate magnesium salt 8, polyoxyethylene lauryl ether 5, lauric acid

diethanolamide 5, EtOH 5%, and balance water.

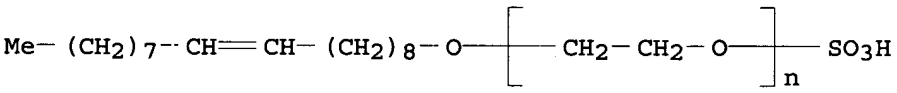
IT **9004-82-4**, Polyoxyethylene lauryl ether sulfate sodium salt
27233-34-7 34431-26-0 62755-21-9
72427-94-2 87569-97-9
RL: TEM (Technical or engineered material use); USES (Uses)
(polyoxyethylene sulfate-based **cleaner** compn.)

RN 9004-82-4 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-(dodecyloxy)-, sodium salt (9CI) (CA INDEX NAME)



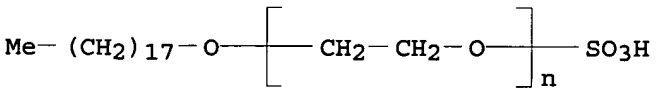
● Na

RN 27233-34-7 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(9Z)-9-octadecenyloxy]-, sodium salt (9CI) (CA INDEX NAME)



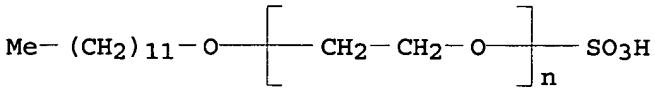
● Na

RN 34431-26-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-(octadecyloxy)-, sodium salt (9CI) (CA INDEX NAME)



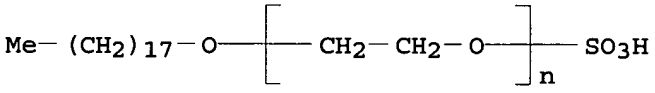
● Na

RN 62755-21-9 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-(dodecyloxy)-, magnesium salt (9CI) (CA INDEX NAME)



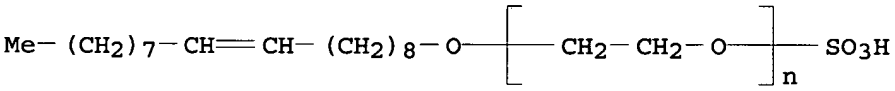
●1/2 Mg

RN 72427-94-2 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-(octadecyloxy)-, magnesium salt (9CI) (CA INDEX NAME)



●1/2 Mg

RN 87569-97-9 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-[(9Z)-9-octadecenyloxy]-, magnesium salt (9CI) (CA INDEX NAME)



●1/2 Mg

IC ICM C11D001-29
ICS C11D001-83; C11D001-29; C11D001-72; C11D001-52
CC **46-3** (Surface Active Agents and Detergents)
ST polyoxyethylene sulfate cleaner compn; nonionic **surfactant** cleaner compn; lauric acid diethanolamide cleaner compn
IT **Surfactants**
(nonionic; polyoxyethylene sulfate-based **cleaner** compn.)
IT **Detergents**
(polyoxyethylene sulfate-based **cleaner** compn.)
IT 64-17-5, Ethanol, uses 120-40-1, Lauric acid diethanolamide 9002-92-0, Polyoxyethylene lauryl ether **9004-82-4**, Polyoxyethylene lauryl ether sulfate sodium salt **27233-34-7 34431-26-0 62755-21-9 72427-94-2 87569-97-9**
RL: TEM (Technical or engineered material use); USES (Uses)
(polyoxyethylene sulfate-based **cleaner** compn.)

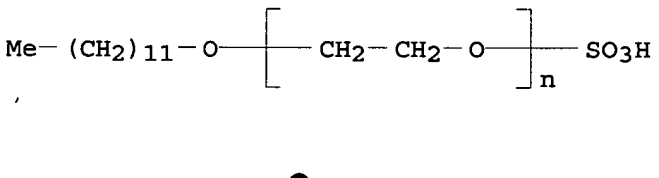
L43 ANSWER 14 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
1997:189703 Document No. 126:187652 Diamine salt-based foamable cleaning **compositions.** Imoto, Hiroyuki; Yahagi, Kazuyuki (Kao Corp, Japan). Jpn. Kokai Tokkyo Koho JP 09003483 A2 19970107 Heisei, 5 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1995-157443 19950623.

AB The compns. comprise anionic **surfactants** of diamine salts comprising a pair ion of HN+X1X2(CH2)mCA1A2(CH2)nN+X3X4H (I), optionally, cationic polymers. Thus, a **shampoo** compn. was prepd. from an aq. soln. contg. polyoxyethylene lauryl ether sodium sulfate 12.0, a salt of C12H25OSO3H and I (X1-4 = H; A1-2 H; m,n = 1, Y = Cl) 2, JR 400 0.3 and SM 8702C 1.0% and additives.

IT **9004-82-4**, Polyoxyethylene lauryl ether sodium sulfate
RL: BUU (Biological use, unclassified); PRP (Properties); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)
(compns. contg.; diamine salt-based foamable **cleaning** compns.)

RN 9004-82-4 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-(dodecyloxy)-, sodium salt (9CI) (CA INDEX NAME)



IC ICM C11D001-12
ICS A61K007-075; A61K007-50; C11D003-37

CC **46-3** (Surface Active Agents and Detergents)
Section cross-reference(s): 62

ST cleaning compn diamine salt; polyoxyethylene lauryl ether salt cleaning; cationic cellulose diamine salt **shampoo**; silicone diamine salt cleaning compn; anionic **surfactant** diamine sulfate

IT Polysiloxanes, uses
RL: BUU (Biological use, unclassified); PRP (Properties); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)
(BY 22-029; diamine salt-based foamable **cleaning** compns.)

IT **Surfactants**
(anionic; diamine salt-based foamable **cleaning** compns.)

IT Quaternary ammonium compounds, uses
RL: BUU (Biological use, unclassified); PRP (Properties); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)
(compns. contg.; diamine salt-based foamable **cleaning** compns.)

IT **Detergents**
Shampoos

(diamine salt-based foamable **cleaning** compns.)

IT 10517-44-9 34989-00-9 52198-63-7 150507-32-7 187403-33-4 187403-37-8
RL: BUU (Biological use, unclassified); PRP (Properties); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)
(anionic **surfactants**; diamine salt-based foamable **cleaning** compns.)

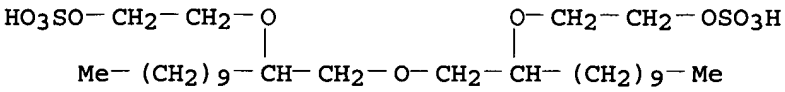
IT 102-71-6D, amidoamino derivs. 627-83-8, Ethylene glycol distearate **9004-82-4**, Polyoxyethylene lauryl ether sodium sulfate 20526-58-3D, Sulfosuccinic acid sodium salt, alkyl deriv. 26590-05-6, Merquat 550 81859-24-7 143711-48-2, SM 8702C 177191-09-2
RL: BUU (Biological use, unclassified); PRP (Properties); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)
(compns. contg.; diamine salt-based foamable **cleaning** compns.)

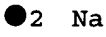
L43 ANSWER 15 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
1997:18389 Document No. 126:48619 Oligomeric alkyl ether sulfates and their use in cleaning **compositions.** Ricca, Jean-Marc (Rhone-Poulenc Chimie SA, Fr.; Ricca, Jean-Marc). PCT Int. Appl. WO 9635663 A1 19961114, 36 pp. DESIGNATED STATES: W: AL, AM, AU, BB, BG, BR, CA, CN, CZ, EE, GE, HU, IS, JP, KP, KR, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (French). CODEN: PIXXD2. APPLICATION: WO 1996-FR715 19960510. PRIORITY: FR 1995-5597 19950511.

AB Oligomeric alkyl ether sulfates having the general formula Z[CH2CH(CH2R1)O(CH2CH2O)mSO3M]2 [I; M = alkali metal, alk. earth metal, quaternary ammonium; each R1 = O(CHR2CH2O)mQ; each Q = C4-18 alkyl, alkoxy, alkenyl, or alkenyloxy; R2 = H, (OCH2CH2)qOSO3M; Z = (OCH2CHR3)pO; R3 = H, O(CHR2CH2O)mQ, (OCH2CH2)qOSO3M; m, q = 1-20; p = 0-20] are useful as **surfactants** in cleaning, cosmetic and toothpaste compns. Reaction of Me(CH2)9OCH2CH(OH)CH2OH with decyl glycidyl ether in toluene in the presence of KOH gave [Me(CH2)9OCH2CH(OH)CH2]2O, which reacted with ethylene sulfate under similar conditions to give I (M = Na, R1 = decyloxy, m = 1) as a hygroscopic white powder with crit. micelle concn. 0.028 mM.

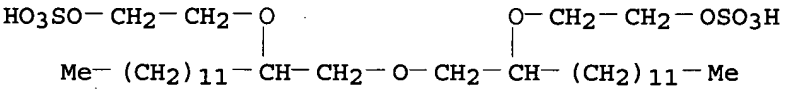
IT **184951-07-3P 184951-08-4P 184951-14-2P**
RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)
(prepn. of oligomeric alkyl ether sulfates and their use in **cleaning** compns.)

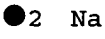
RN 184951-07-3 HCAPLUS
CN Ethanol, 2,2'-[oxybis[(1-decyl-2,1-ethanediyl)oxy]]bis-, bis(hydrogen sulfate), disodium salt (9CI) (CA INDEX NAME)



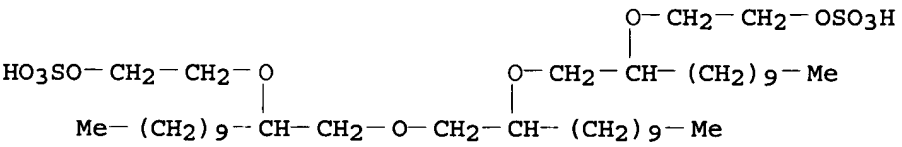


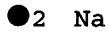
RN 184951-08-4 HCAPLUS
CN Ethanol, 2,2'-[oxybis[(1-dodecyl-2,1-ethanediyl)oxy]]bis-, bis(hydrogen sulfate), disodium salt (9CI) (CA INDEX NAME)





RN 184951-14-2 HCAPLUS
CN 3,6,9,12-Tetraoxatetradecane-1,14-diol, 4,7,11-tris(decyl)-, bis(hydrogen sulfate), disodium salt (9CI) (CA INDEX NAME)





IC ICM C07C305-10
ICS C11D001-16; A61K007-16
CC **46-3** (Surface Active Agents and Detergents)
Section cross-reference(s): 62
ST anionic **surfactant** alkyl ether sulfate; **detergent** compn anionic **surfactant**; cosmetic compn anionic **surfactant**; toothpaste compn anionic **surfactant**
IT **Surfactants**
(anionic; prepn. of oligomeric alkyl ether sulfates and their use in **cleaning** compns.)
IT Cosmetics
Dentifrices
Detergents
(prepn. of oligomeric alkyl ether sulfates and their use in **cleaning** compns.)
IT **184951-07-3P 184951-08-4P** 184951-10-8P

184951-12-0P **184951-14-2P**
RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)
(prepn. of oligomeric alkyl ether sulfates and their use in **cleaning** compns.)

IT 1072-53-3P, Ethylene sulfate 3647-12-9P, Bis(2-hydroxydodecyl) ether 124029-03-4P, Bis(2-hydroxytetradecyl) ether 134450-08-1P 184951-04-0P 184951-05-1P 184951-06-2P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of oligomeric alkyl ether sulfates and their use in **cleaning** compns.)

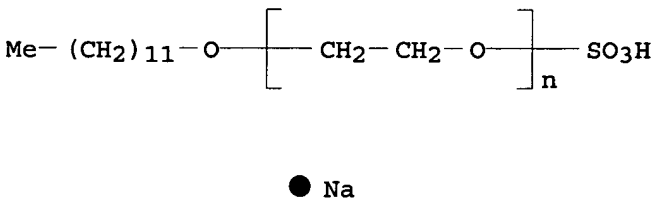
IT 1119-87-5, 1,2-Dodecanediol 1561-07-5, 3-Dodecyloxy-1,2-propanediol 2461-18-9, Dodecyl glycidyl ether 2855-19-8, 1,2-Epoxydodecane 3234-28-4, 1,2-Epoxytetradecane 3497-06-1, Decyl glycidyl ether 3741-38-6, Ethylene sulfite 10430-97-4, 3-Decyloxy-1,2-propanediol 21129-09-9, 1,2-Tetradecanediol
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of oligomeric alkyl ether sulfates and their use in **cleaning** compns.)

L43 ANSWER 16 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
1997:5556 Document No. 126:48616 Optimization of a liquid **detergent formulation.** Moussaoui, M.; Saci, L.; Zaid, T. Ahmed; Chitour, C. E. (Departement de genie chimique, Ecole nationale polytechnique, Algiers, Algeria). Journal de la Societe Chimique de Tunisie, 3(11), 839-846 (French) 1996. CODEN: JSCTDP. ISSN: 0253-1208. Publisher: Societe Chimique de Tunisie.

AB Plackett-Burman exptl. design is applied to a five-component dishwasher liq. **detergent** formulation in order to det. which components affect five different properties of the formulation. Regression anal. and linear programming are then applied to the results of anal. in order to obtain a low cost formulation which matches or exceeds the properties of a com. available product.

IT **9004-82-4**, Sodium lauryl ether sulfate
RL: TEM (Technical or engineered material use); USES (Uses)
(**detergent** component; optimization of liq. dishwashing **detergent** formulation by regression anal. and linear programming)

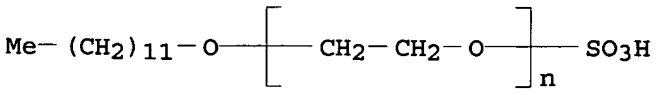
RN 9004-82-4 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-(dodecyloxy)-, sodium salt (9CI) (CA INDEX NAME)



CC **46-3** (Surface Active Agents and Detergents)
ST liq dishwashing **detergent** formulation optimization

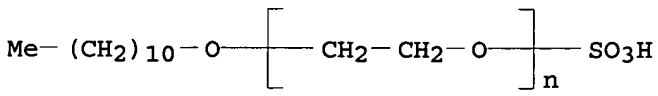
IT Amides, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(coco, N,N-bis(hydroxyethyl), **detergent** component; optimization of liq. dishwashing **detergent** formulation by regression anal. and linear programming)
IT **Detergents**
(dishwashing; optimization of liq. dishwashing **detergent** formulation by regression anal. and linear programming)
IT Optimization
(optimization of liq. dishwashing **detergent** formulation by regression anal. and linear programming)
IT 57-13-6, Urea, uses 657-84-1, Sodium toluenesulfonate **9004-82-4**, Sodium lauryl ether sulfate 25155-30-0, Sodium dodecylbenzenesulfonate
RL: TEM (Technical or engineered material use); USES (Uses)
(**detergent** component; optimization of liq. dishwashing **detergent** formulation by regression anal. and linear programming)

L43 ANSWER 17 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
1992:196629 Document No. 116:196629 Liquid **detergent compositions.** Miyashita, Yoko; Nomura, Koki; Nishino, Takashi; Ota, Seiichi (Lion Corp., Japan). Jpn. Kokai Tokkyo Koho JP 03273100 A2 19911204 Heisei, 5 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1990-72483 19900320.
AB The title compns., esp. useful for cleaning oily stains from surfaces of stainless steel in kitchens, have pH ≥9 and comprise 0.1-8% **surfactants** selected from long-chain olefin sulfonate salts and polyoxyethylene long-chain alkyl ether sulfate salts and 1-20% of slightly water-sol. solvents C4H9O(C2H4O)m(C3H6O)nH (I: m = 0.5-1.5; n = 1-3). Thus, an aq. compn. with pH 11.9 contg. C14 α-olefin sulfonic acid Na salt 5.0, monoethanolamine 6.0, fragrance 0.1, and I (m = 1, n = 1.25) 7.0% was used to remove oils from SUS 304 plate to show a finished surface with good gloss, vs. poor using a compn. contg. I (m = 1, n = 3.60) instead.
IT **9004-82-4 9014-91-9 27731-62-0 54116-08-4**
RL: TEM (Technical or engineered material use); USES (Uses)
(**surfactants**, liq. **detergents** contg., for stainless steel **cleaning**)
RN 9004-82-4 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-(dodecyloxy)-, sodium salt (9CI) (CA INDEX NAME)



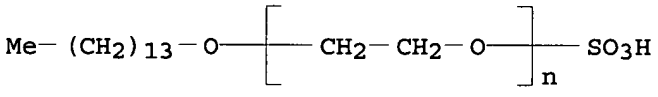
RN 9014-91-9 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-(undecyloxy)-, sodium salt (9CI) (CA INDEX NAME)



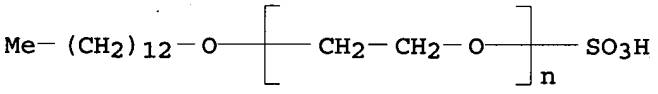
● Na

RN 27731-62-0 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-(tetradecyloxy)-, sodium salt (9CI) (CA INDEX NAME)



● Na

RN 54116-08-4 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-(tridecyloxy)-, sodium salt (9CI) (CA INDEX NAME)



● Na

IC ICM C11D010-02
ICI C11D010-02, C11D007-50, C11D001-14, C11D001-29, C11D007-26
CC **46-3** (Surface Active Agents and Detergents)
Section cross-reference(s): 55
ST liq **detergent** stainless steel cleaning; solvent polyoxyalkylene ether **detergent**
IT **Detergents**
(liq., ethylene oxide-propylene oxide copolymer Bu ether and **surfactants** in, for stainless steel)
IT 11109-50-5, SUS 304
RL: PROC (Process)
(**cleaning** of, liq. **detergents** for)
IT 9038-95-3, Ethylene oxide-propylene oxide copolymer butyl ether
RL: USES (Uses)
(liq. **detergents** contg., as solvents, for stainless

steel **cleaning**)

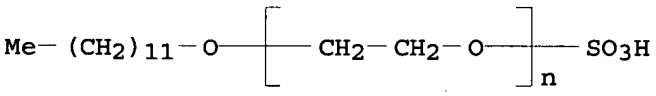
IT **9004-82-4 9014-91-9 27731-62-0**
54116-08-4
RL: TEM (Technical or engineered material use); USES (Uses)
(**surfactants**, liq. **detergents** contg., for stainless steel **cleaning**)

L43 ANSWER 18 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
1990:141785 Document No. 112:141785 **Detergent compositions** containing sulfotricarballylates. Fujii, Yasuyuki; Saijo, Hiroyuki; Deguchi, Katsuhiko (Kao Corp., Japan). Jpn. Kokai Tokkyo Koho JP 01242696 A2 19890927 Heisei, 4 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1988-68929 19880323.

AB The title compns. with good foaming and rinsing property in water of various hardness comprise R1O2CCH2C(SO3X)(CO2R2)CH2CO2R3 (I) and/or R1O2CCH(SO3X)CH(CO2R2)CH2CO2R3 (II) (R1-3 = H, C1-20 alkyl or alkenyl, alkali metal, alk. earth metal, org. amine; ≥2 of R1-3 is alkyl or alkenyl, total C no. of R1-3 is 12-24; X = alkali metal, alk. earth metal, org. amine) and ≥1 **surfactant** selected from R4O(C2H4O)nSO3X (III; R4 = C10-18 alkyl, alkenyl, or alkylphenyl; av. n = 1-14), R5O(C2H4O)mH (IV; R5 = C8-20 alkyl, alkenyl, or alkylphenyl; av. m = 1-20), and 4-R6C6H4SO3X (R6 = C9-15 alkyl or alkenyl). Thus, an aq. **detergent** contg. I-II (1/1) mixt. (R1-3 = CH2CHEt2, X = Na) 12, III (R4 = dodecyl, X = Na, n = 3) 8, and IV (R5 = dodecyl, m = 7) 8% showed excellent oil **detergency**, foaming ability, and rinsing property in water with hardness 3.5-10°.

IT **9004-82-4**
RL: USES (Uses)
(**detergents**, contg. sulfotricarballylates, with good **rinsing** and foaming property)

RN 9004-82-4 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-(dodecyloxy)-, sodium salt (9CI) (CA INDEX NAME)



IC ICM C11D001-28
ICS C11D001-83
ICI C11D001-83, C11D001-22, C11D001-28, C11D001-29, C11D001-72
CC **46-3** (Surface Active Agents and Detergents)
ST sulfotricarballylate blend **detergent** rinsing foaming; nonionic **surfactant detergent** sulfotricarballylate; anionic **surfactant detergent** sulfotricarballylate; polyoxyalkylene **surfactant detergent** sulfotricarballylate

IT **Detergents**
(contg. sulfotricarballylates and **surfactant**, with good

rinsing and foaming property)

IT **Detergents**
(dishwashing, contg. sulfotricarballylates and **surfactants**, with good **rinsing** and foaming property)

IT 119598-68-4 125111-19-5 125111-20-8 125111-21-9 125111-22-0 125111-23-1
RL: TEM (Technical or engineered material use); USES (Uses)
(**detergents** contg., with good **rinsing** and foaming property)

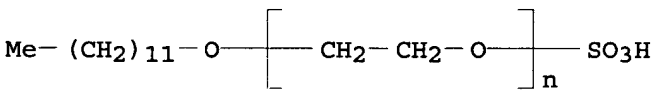
IT 9002-92-0, Poly(oxyethylene) dodecyl ether **9004-82-4** 25155-30-0, Sodium dodecylbenzenesulfonate
RL: USES (Uses)
(**detergents**, contg. sulfotricarballylates, with good **rinsing** and foaming property)

L43 ANSWER 19 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
1990:79994 Document No. 112:79994 Dishwashing **detergent compositions.** Monma, Tsunemi; Tsuru, Tatsuya; Sakuma, Yumi (Kunimine Industries Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 01182399 A2 19890720 Heisei, 6 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1988-3681 19880113.

AB The title compns. useful for metal, glass, porcelain, china, etc., contain layered silicate minerals 100, anionic **surfactants** 50-1000, and amphoteric **surfactants** 50-1000 parts. Thus, an aq. soln. contg. 3 parts Smectone SA and 0.2 part CMC was blended with Tohol N 230X (lauryldiethanolamide) 5, Runox S 40T (dodecylbenzenesulfonic acid triethanolamine salt) 10, and Obanol 516 10 parts and dild. with H2O to give a dishwashing **detergent** with good handle.

IT **9004-82-4**, Alscoap TAP 30
RL: USES (Uses)
(dishwashing **detergents** contg. layered silicates and, with good handle)

RN 9004-82-4 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-(dodecyloxy)-, sodium salt (9CI) (CA INDEX NAME)



● Na

IC ICM C11D001-94
ICS C11D003-12

ICI C11D001-94, C11D001-12, C11D001-88, C11D003-12

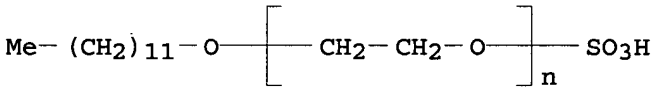
CC **46-3** (Surface Active Agents and Detergents)

ST dishwashing **detergent** layered silicate salt; anionic **surfactant** dishwashing **detergent** handle; amphoteric **surfactant** dishwashing **detergent** handle

IT Betaines
RL: USES (Uses)
(coco alkyldimethyl, dishwashing **detergents** contg. layered silicates and, Nissan Anon BF, with good handle)
IT **Detergents**
(dishwashing, contg. layered silicates and anionic **surfactants** and amphoteric **surfactants**, with good handle)
IT Silicates, uses and miscellaneous
RL: USES (Uses)
(layered, dishwashing **detergents** contg. **surfactants** and, with good handle)
IT 151-21-3, Sodium lauryl sulfate, uses and miscellaneous
RL: USES (Uses)
(dishwashing **detergents** contg. layered silicates and, Alscoap LN 40A, with good handle)
IT 27323-41-7, Dodecylbenzenesulfonic acid triethanolamine salt
RL: USES (Uses)
(dishwashing **detergents** contg. layered silicates and, Runox S 40T, with good handle)
IT 120-40-1, Lauryl diethanolamide
RL: USES (Uses)
(dishwashing **detergents** contg. layered silicates and, Tohol N 230X, with good handle)
IT **9004-82-4**, Alscoap TAP 30 51811-79-1, Gafac PE 510 95145-42-9, Obanol 516
RL: USES (Uses)
(dishwashing **detergents** contg. layered silicates and, with good handle)
IT 1318-93-0, Kunipia F, uses and miscellaneous 53320-86-8, Laponite XLS 120668-89-5, Smectone SA
RL: USES (Uses)
(dishwashing **detergents** contg. **surfactants** and, with good handle)

L43 ANSWER 20 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
1989:480372 Document No. 111:80372 Liquid **detergent compositions** with good storage stability. Bulfari, Mario; Van de Pas, Johannes Cornelis (Unilever N. V., Neth.). Braz. Pedido PI BR 8803786 A 19890221, 35 pp. (Portuguese). CODEN: BPXXDX. APPLICATION: BR 1988-3786 19880729. PRIORITY: GB 1987-18216 19870731; GB 1988-13689 19880609.
AB The compns., with phase sepn. after 21 days <2%, comprise active **detergents** dispersed in an aq. phase contg. partially dissolved viscosity-reducing polymers [e.g., copolymers of alkali metal salts of (meth)acrylic or maleic acid] and dissolved electrolytes, and show viscosity ≤1 Pa-s at shear rate 21 s-1. An aq. soln. contg. Na dodecylbenzenesulfonate 7.7, lauryl ethoxylate sulfate 2.4, ethoxylated fatty alc. 2.4, zeolites 20.0, acrylic acid-maleic acid copolymer Na salt 3.5, citric acid 1.5, glycerol 8.0, borax 5.7, and additives 1.4% had viscosity 800 mPa-s and showed phase sepn. (after 3 mo) <2%.
IT **9004-82-4**
RL: USES (Uses)
(storage-stable liq. **detergents** contg. acrylate-maleate viscosity-reducing polymers and)

RN 9004-82-4 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-(dodecyloxy)-, sodium salt (9CI) (CA INDEX NAME)

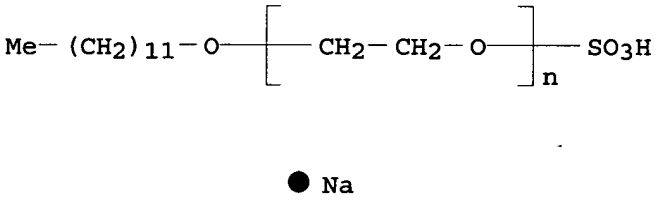


● Na

IC ICM C11D003-37
ICS C11D001-83; C11D003-14
CC **46-3** (Surface Active Agents and Detergents)
ST storage stability liq **detergent** compn; dodecylbenzenesulfonate sodium stable liq **detergent**; acrylate maleate copolymer **detergent** compn; phase sepn prevention liq **detergent**; viscosity redn liq **detergent**
IT Alcohols, compounds
RL: USES (Uses)
(C13-15, ethoxylated, storage-stable liq. **detergents** contg. anionic **surfactants** and acrylate-maleate viscosity-reducing polymers and)
IT **Detergents**
(liq., manuf. of, contg. acrylate-maleate polymer viscosity reducers, storage-stable)
IT **9004-82-4** 25155-30-0, Sodium dodecylbenzenesulfonate
RL: USES (Uses)
(storage-stable liq. **detergents** contg. acrylate-maleate viscosity-reducing polymers and)
IT 25549-84-2, Poly(sodium acrylate) 60472-42-6
RL: USES (Uses)
(viscosity reducers, storage-stable liq. **detergents** contg.)

L43 ANSWER 21 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
1989:480371 Document No. 111:80371 Anionic liquid **detergent compositions** with good foaming in hard water. Kanekiyo, Takasumi; Tanaka, Noriaki; Koizumi, Yoshitaka (Mitsubishi Petrochemical Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 01016898 A2 19890120 Heisei, 3 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1987-172651 19870710.
AB Title compns. with excellent scum dispersion, useful in **shampoos** and face cleansers and for dishwashing and laundry (no data), contain 1-10 parts R1O(CH2CH2O)rSO3M (I: R1 = C7-21 alkyl, alkenyl; M = alkali metal; r = 0.5-7) and 1 part R2CONH(CH2CH2O)pSO3M (II: R2 = C7-19 alkyl, alkenyl; M = alkali metal; p = 1-3). Thus, an aq. soln. contg. 20% I (R1 = dodecyl, M = Na, r = 3) and 2.5% II (R2 = C11H23, M = Na, p = 1) (III) showed viscosity 7 cP and good foaming in water contg. 10 ppm Ca and simulated skin oils, vs. 10 cP and poor foaming for a compn. contg. coconut-oil fatty acid diethanolamide instead of III.

IT **9004-82-4**
RL: USES (Uses)
(oligomeric, liq. **detergents** contg., with good foaming and scum dispersion in hard water)
RN 9004-82-4 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-(dodecyloxy)-, sodium salt (9CI) (CA INDEX NAME)



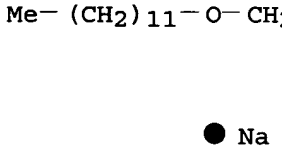
IC ICM C11D001-29
ICS A61K007-075; A61K007-50
CC **46-3** (Surface Active Agents and Detergents)
Section cross-reference(s): 62
ST liq **detergent** anionic **surfactant**; foaming property liq **detergent**; **shampoo** anionic **surfactant**; dishwashing **detergent** liq anionic **surfactant**; laundry **detergent** liq anionic **surfactant**; polyoxyethylene sulfate salt liq **detergent**; alc ether sulfate liq **detergent**; amide ether sulfate liq **detergent**; ethoxylated fatty amide alc **detergent**
IT Amides, compounds
RL: USES (Uses)
(fatty, N-(hydroxyethyl), ethoxylated, sulfates, alkali metal salts, liq. **detergents** contg., with good foaming and scum dispersion in hard water)
IT **Detergents**
(liq., ethoxylated fatty alc. and amide sulfate mixts., with good foaming and scum dispersion in hard water)
IT 142-86-9
RL: USES (Uses)
(liq. **detergents** contg., with good foaming and scum dispersion in hard water)
IT **9004-82-4** 34870-92-3D, fatty ether and amide derivs., alkali metal salts
RL: USES (Uses)
(oligomeric, liq. **detergents** contg., with good foaming and scum dispersion in hard water)

L43 ANSWER 22 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
1980:552005 Document No. 93:152005 Krafft points of anionic **surfactants** and their **mixtures** with special attention to their applicability in hard water. Tsujii, Kaoru; Saito, Naoyuki; Takeuchi, Takashi (Tochigi Res. Lab., Kao Soap Co., Tochigi, 321-34, Japan). Journal of Physical Chemistry, 84(18), 2287-91 (English) 1980. CODEN: JPCHAX. ISSN: 0022-3654.
AB The Krafft points are detd. for the Na and Ca salts of linear octyl-

and dodecylbenzenesulfonic acids, C12H25O(CH2CH2O)nSO3H (I) (n = 1 or 3), C12H25CH(OH)CH2CH2SO3H, and C12H25CH:CHCH2SO3H and their mixts. The salts of I are the best **surfactants** for use in hard water, i.e., their Na and Ca salts are sol. at room temp. and for binary **surfactant** mixts., the Krafft point either reaches a min. at a certain compn. (group I mixts.) or varies monotonously with the compn. change (group II mixts.). From the compn. anal. of the solid phase, the components are immiscible in group I mixts. and completely miscible in group II mixts. The thermodn. theory for f.p. depression is applied favorably to the Krafft point vs. compn. curves for the group I mixts. Theor. calcns. for the Krafft point vs. compn. curve (liquidus curve) and the corresponding solidus curve for group II mixts. agreed poorly with the obsd. curves.

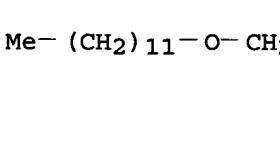
IT **15826-16-1 41343-91-3**
RL: USES (Uses)
(Krafft point and hard water applicability of)

RN 15826-16-1 HCAPLUS
CN Ethanol, 2-(dodecyloxy)-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)



● Na

RN 41343-91-3 HCAPLUS
CN Ethanol, 2-(dodecyloxy)-, hydrogen sulfate, calcium salt (9CI) (CA INDEX NAME)



●1/2 Ca

CC **46-3** (Surface Active Agents and Detergents)
ST Krafft point anionic **surfactant**; sulfate **surfactant** Krafft point; sulfonate **surfactant** Krafft point; anionic **surfactant** Krafft point; calcium salt **surfactant**; Krafft point
IT Krafft point
(of anionic **surfactants** as sodium and calcium salts)
IT **Detergents**
(anionic, sodium and calcium salts of, Krafft point and hard water applicability of)
IT 13150-00-0 13513-24-1 **15826-16-1** 25155-30-0
26264-06-2 28675-11-8 38826-82-3 **41343-91-3**
70497-16-4 74062-35-4 74077-32-0 74077-33-1
RL: USES (Uses)
(Krafft point and hard water applicability of)

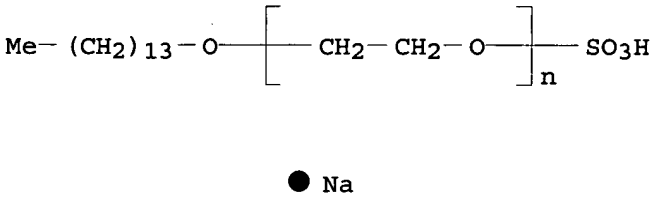
L43 ANSWER 23 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
1977:108357 Document No. 86:108357 Cleaning **compositions** containing alkyl ether sulfate **detergents.** Aalbers, Johan Gerhard; Van Paassen, Nicolaas Adrianus Ignatius (CHEM-Y, Fabriek van Chemische Produkten B. V., Neth.). Ger. Offen. DE 2632953 19770210, 15 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1976-2632953 19760722.

AB Ethoxylation of alcs. in the presence of SbCl5 catalysts, followed by sulfation, gave RO(C2H2O)nSO3Na (R = C10-15 alkyl, n = 1-5) which had good foaming properties, gave aq. solns. suitable for thickening by the addn. of NaCl, and were esp. useful in liq. **detergent** formulation for washing dishes and hair.

IT **27731-62-0**
RL: TEM (Technical or engineered material use); USES (Uses)
(**cleaning** compns. contg., with improved viscosity and foaming properties)

RN 27731-62-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-(tetradecyloxy)-, sodium salt (9CI) (CA INDEX NAME)



● Na

IC C11D001-16

CC **46-3** (Surface Active Agents and Detergents)

ST alkyl ether sulfate **detergent**; dishwashing alkyl ether sulfate; **shampoo** alkyl ether sulfate; ethoxylate alc sulfate **detergent**; foaming alkyl ether sulfate; thickening alkyl ether sulfate

IT **Detergents**
(alkyl ether sulfate, with improved viscosity and foaming properties)

IT Viscosity
(alkyl ether sulfates for liq. **detergents** with improved)

IT Alcohols, uses and miscellaneous
(C12-15 aliph., branched, **cleaning** compns. contg., with improved viscosity and foaming properties)

IT Alcohols, compounds
(C12-15 aliph., ethoxy, sodium sulfates, **cleaning** compns. contg., with improved viscosity and foaming properties)

IT 25322-68-3D, monoalkyl ether, sulfate, sodium salts
27731-62-0 39388-31-3D, ethoxylated, sulfated, sodium salt
RL: TEM (Technical or engineered material use); USES (Uses)
(**cleaning** compns. contg., with improved viscosity and foaming properties)

L43 ANSWER 24 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN

1975:412744 Document No. 83:12744 Disinfectant **detergent mixtures.** Gluck, Bruno (BOCO Waeschedienst Ernst Rethwisch, Fed. Rep. Ger.). Ger. Offen. DE 2341785 19750227, 16 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1973-2341785 19730817.

AB Disinfectant **detergents** contained iodine [7553-56-2], **surfactant** poly(oxethylene) condensates, e.g. polyethylene glycol nonylphenyl ether (I) [9016-45-9] and another **surfactant**, e.g. Na dodecylbenzenesulfonate (II) [25155-30-0], or triethanolamine lauryl ether sulfate [**52094-59-4**]. Thus, 0.05 parts iodine were added to 20 parts aq. soln. contg. ethoxylated I 2, II 4, and Na lauryl sulfate [151-21-3] 6 parts and the pH was adjusted to 5.5. by citric acid addn. to give a conc., which was dild. 1:10 before use.

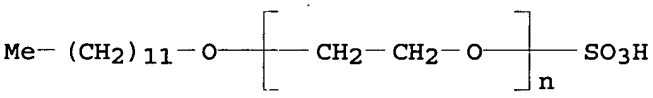
IT **27028-82-6**
RL: USES (Uses)
(**disinfectant detergents** contg. iodine)

RN 27028-82-6 HCAPLUS

CN Ethanol, 2,2',2''-nitrilotris-, compd. with α-sulfo-ω-(dodecyloxy)poly(oxy-1,2-ethanediyl) (1:1) (9CI) (CA INDEX NAME)

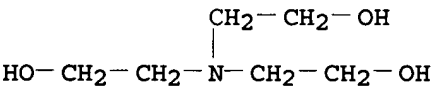
CM 1

CRN 26183-44-8
CMF (C2 H4 O)n C12 H26 O4 S
CCI PMS



CM 2

CRN 102-71-6
CMF C6 H15 N O3



IC C11D

CC **46-3** (Surface Active Agents and Detergents)
Section cross-reference(s): 63

ST disinfectant **detergent** iodine

IT **Detergents**
(bactericides for, iodine as)

IT Bactericides, **Disinfectants** and Antiseptics
(iodine, in **detergents**)

IT 7553-56-2, uses and miscellaneous
RL: USES (Uses)
(**disinfectant detergents** contg.)

IT 120-40-1 151-21-3, uses and miscellaneous 1331-61-9 9003-39-8

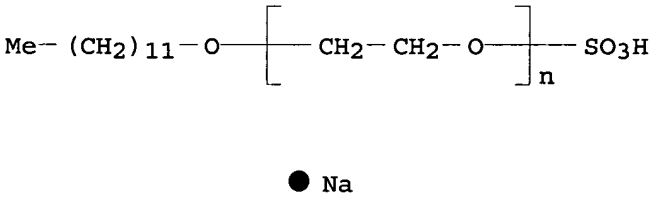
9014-90-8 9016-45-9 9036-19-5 25155-30-0 26545-53-9
27028-82-6 45205-25-2
RL: USES (Uses)
(**disinfectant detergents** contg. iodine)

L43 ANSWER 25 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
1974:465557 Document No. 81:65557 Liquid **detergent compositions** having pearllike luster. Naganuma, Yoshinori (Kao Soap Co., Ltd.). Jpn. Tokkyo Koho JP 48042937 B4 19731215 Showa, 5 pp. (Japanese). CODEN: JAXXAD. APPLICATION: JP 1969-76398 19690925.

AB **Detergents** contg. an alkoxy or alkylphenoxy polyethenoxyethyl sulfate and a fatty acid alkylol amide had good washing and foaming power and pearllike luster and were mild to the skin. Thus, a **detergent** comprised polyethylene glycol monolauryl ether Na sulfate [**9004-82-4**] 15, lauric acid monoethanolamide [142-78-9] 5, urea 5, perfume 0.2, and water 74.8% and a trace amt. of coloring substance.

IT **9004-82-4**
RL: TEM (Technical or engineered material use); USES (Uses)
(**detergents** contg., for pearllike luster)

RN 9004-82-4 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-sulfo-ω-(dodecyloxy)-, sodium salt (9CI) (CA INDEX NAME)



IC C11D
CC **46-3** (Surface Active Agents and Detergents)
ST pearllike luster liq **detergent**; alkylol amide **detergent** luster; polyethylene glycol sulfate **detergent** luster
IT Amides, compounds
RL: USES (Uses)
(alkylol derivs., **detergents** contg., for pearllike luster)
IT Luster
(liq. **detergent** with pearllike)
IT **Detergents**
(liq., with pearllike luster)
IT 142-78-9 **9004-82-4**
RL: TEM (Technical or engineered material use); USES (Uses)
(**detergents** contg., for pearllike luster)

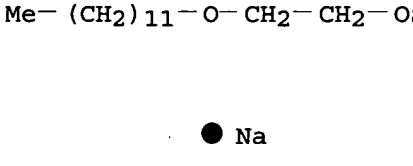
L43 ANSWER 26 OF 26 HCAPLUS COPYRIGHT 2005 ACS on STN
1973:99474 Document No. 78:99474 Krafft points of calcium and sodium dodecylpoly(oxyethylene) sulfates and their **mixtures.** Hato, Masakatsu; Shinoda, Kozo (Res. Inst. Polym. Text., Yokohama,

Japan). Journal of Physical Chemistry, 77(3), 378-81 (English) 1973. CODEN: JPCHAX. ISSN: 0022-3654.

AB Increasing the oxyethylene chain length of calcium- [**34354-50-2**] and Na dodecylpoly(oxyethylene) sulfate (I) [**9004-82-4**] decreased the crit. micelle concn. and depressed the Krafft point, thereby rendering the Ca salts suitable for hard water **surfactants.** Addn. of Ca to I aq. soln. initially depressed the Krafft point, then increased it rapidly up to the Krafft point of the added Ca salt. The change in Krafft point of a binary **surfactant** mixt. was very similar to f.p. depression in a binary mixt.

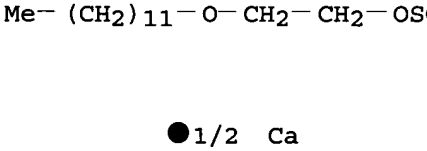
IT **15826-16-1 41343-91-3**
RL: PRP (Properties)
(critical micelle concentration of and Krafft point of,)

RN 15826-16-1 HCAPLUS
CN Ethanol, 2-(dodecyloxy)-, hydrogen sulfate, sodium salt (9CI) (CA INDEX NAME)



● Na

RN 41343-91-3 HCAPLUS
CN Ethanol, 2-(dodecyloxy)-, hydrogen sulfate, calcium salt (9CI) (CA INDEX NAME)



●1/2 Ca

CC **46-3** (Surface Active Agents and Detergents)

ST crit micelle concn **surfactant**; Krafft point ethoxylation degree; sodium alkyl glycol sulfate; calcium alkyl glycol sulfate; polyoxyethylene glycol sulfate **surfactant**; binary **surfactant** Krafft point

IT **Detergents**
(calcium and sodium dodecylpoly(oxyethylene) sulfates, critical micelle concn. and Krafft point of)

IT 151-21-3, properties 3088-31-1 4780-52-3 13150-00-0 **15826-16-1** 38826-82-3 **41343-91-3** 41343-92-4
RL: PRP (Properties)
(critical micelle concentration of and Krafft point of,)

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